

MACDONALD COLLEGE JOURNAL



VOLUME 3
No. 5



JANUARY
1943

Farm . Home . School

HOLD HIGH THE TORCH OF FREEDOM



FARMERS . . . AS IMPORTANT AS ARMOURERS . . .

It may not appear so dramatic to operate a dairy farm, to grow grain or raise bacon as to make planes and steel tanks, but the work of the farmer is just as essential to victory as the work of the armament maker.

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A NEW YEAR'S MESSAGE

I wish to take advantage of this issue of the *Journal* to offer my most sincere wishes for a Happy New Year and to express a prayer that during the coming year we may be blessed with a victorious peace.

For the farmers of this province 1942 will stand out as a year of solid unity and common effort to meet home and world needs for food — particularly bacon, dairy products and eggs. Our amazing war effort in the realm of agriculture has been accomplished in the face of a serious lack of farm labour, a shortage of farm machinery, and other handicaps. However, these serious inconveniences have been offset by better prices and, what is more significant, by the industry and by the intelligent farming methods of our rural population.

In the year which is just beginning every farmer will be urged to do still more to make our agricultural production meet the requirements of our civil population, our fighting forces, and our Allies. The new agreements with Britain call for a greater production of bacon, dairy products and poultry products. The demand for potatoes will also increase. All this must and will be done, notwithstanding a still greater shortage of labour and farm machinery.

To win through in the face of these difficulties the most powerful weapon of the farmer will be knowledge. Everyone's program for 1943 must include the reading of at least one good farm paper such as, I would say, the Macdonald College Journal. In every community farm leaders always manage to find time to read an appropriate farm publication, to consult their agronomist, to study Dominion and Provincial bulletins, Experimental Farm and Agricultural College surveys and reports, and take part in farm radio forums and study groups.

There is no place for guessing and uncertainty in 1943. Only through knowledge will the farmers of the Old Province be able to keep up the pace and improve Quebec's prominent position among her eight sister provinces of the Dominion. In the troubled hours that may come, keep in mind the words of Emerson: "The first farmer was the first man, and all historic nobility rests on possession and use of land".

ADRIEN MORIN, *Associate Deputy Minister of Agriculture.*

Appeals for voluntary rationing of butter failed, just as they did in the case of gasoline, sugar and tea. In the months of October and November Canadians bought sixty-five million pounds of butter — fifteen million pounds more than usual at that time of year. Some of that extra fifteen million pounds probably went to families who, having more money to spend than formerly, increased their use of this food, which is one of the things on which families economize when they must, and use lavishly when they can afford to do so. Some of it probably has gone into cellars and refrigerators; ten pounds here, twenty or thirty pounds there, tucked away "just in case, and because everybody else is doing it."

Wherever it has gone, the fact remains that Canadians, until rationing, were buying butter at the rate of almost three pounds a month for every man, woman and child in the country. That works out to thirty-six pounds a year. Under rationing we will have about twenty-six pounds a year each; and that is four times as much as they get in England.

Our allowance is generous, and even though we all do not admit that rationing was unavoidable, now that it is with us we will accept the situation with good grace, conscious of the fact that at all events no one will get more than his share of the available supply.



AGRICULTURE

Articles on problems of the farm

CANADA'S 1943 PROGRAMME

Early last month representatives of all the provinces met in Ottawa to draw up, with members of the Agricultural Supplies Board and other officials of the Government, a detailed blueprint for farm production in 1943. It was not the first conference of its kind; eight Dominion-Provincial conferences have been held during the past three years. But this is the first time that national requirement could be forecasted accurately enough before the end of a year to make it possible to draw up a complete production programme for the next year.

Dr. A. M. Shaw, Chairman of the Agricultural Supplies Board, presided and over 100 delegates, including members of the various Ottawa departments, six ministers and seven deputy ministers of agriculture, spent three arduous days studying estimates of demand and supply. Probable needs for home consumption had been arrived at with the help of nutritionists who, at a previous conference, outlined the ideal diet. For 1943 it was decided to assume that every adult in Canada would get about 70% of the ideal, and that children would get 100%. From these figures it was possible to estimate how much of each kind of food would have to be produced. To this there was added a sufficient quantity of several items to take care of our contracts with the United Kingdom and for the needs of the armed forces, the Red Cross (for parcels to prisoners of war), supplies for ships' stores, etc.

In this way an objective was set for all crops for 1943, and from the table it will be seen that in almost every case our requirements in 1943 will be greater than the production in 1942. The notable exception is wheat, where a reduction of 18% is suggested.

It was admitted that in some cases at least the goal set was high, but Dr. Shaw made it abundantly clear that the estimates of requirements had been arrived at after very careful study and that the objectives set must be reached in every case if humanly possible. The responsibility for meeting the quotas rests with each Provincial Department of Agriculture. (Details of Quebec's share will be found in the Government section on page 28. Ed.)

All the provincial representatives undertook to do everything possible to see that these increased quotas are met next year, but from all sides came protests that unless labour was made available, these increases would be difficult to get. On behalf of the Department of Labour, Arthur MacNamara made it clear that there was no quick cure-all for farm labour troubles. He promised that present

legislation under Selective Service would be improved to see that labour now on farms is kept there, but held out little hope for any greatly increased supply becoming available. It was suggested that Italian prisoners of war might be used here as they are in England. The labour difficulties of the farmer are keenly appreciated, and everything possible will be done to ease the situation.

This question of labour was the subject of the only resolution presented to the conference and addressed to the Minister of Labour by H. H. Hannam, President of the Canadian Federation of Agriculture. It asked that representatives of agriculture be given a share in administering manpower policies; that call-up notices sent to men on farms be so worded that the recipient would understand clearly that he should seek deferment as an essential worker. It suggested that essential farm workers be given some sort of recognition that would show them to be performing an important war service, and that essential workers should be granted the longest possible term of postponement after each call. It also asked that membership on the National Advisory Committee on Farm Manpower include one farmer from each province and representatives from the Provincial Departments of Agriculture and the C.F.A.


Objectives for Farm Production in 1943

		1942	Objectives 1943	Per cent change
<i>Grains and Hay</i>				
Wheat	acre	21,586,000	17,696,000	18.0 decrease
Oats	"	13,782,000	15,387,000	12.0 increase
Barley	"	6,973,000	7,758,000	11.0 "
Rye	"	1,337,000	924,000	31.0 decrease
Mixed grains	"	1,681,000	1,700,000	1.0 increase
Flaxseed	"	1,492,000	2,500,000	68.0 "
Hay and Clover ..	"	9,707,000	10,450,000	8.0 "
Alfalfa	"	1,440,000	1,690,000	17.0 "
<i>Meat Animals</i>				
Cattle	No.	1,111,400	1,220,000	9.0 increase
Calves	"	739,000	720,000	1.0 decrease
Hogs	"	6,250,000	8,000,000	28.0 increase
Sheep	"	810,000	900,000	12.0 "
<i>Poultry and Eggs</i>				
Eggs	doz.	266,500,000	345,000,000	29.0 increase
Dressed chickens ..	lb.	236,400,000	258,900,000	10.0 "
<i>Dairy Products</i>				
Total milk (000 lb.)		17,487,000	18,176,000	6.0 increase
Factory cheese	lb.	200,000,000	200,000,000	no change
Creamery butter	"	281,000,000	322,260,000	15.0 increase
Evaporated milk	"	182,000,000	190,500,000	5.0 "
Condensed milk	"	24,200,000	17,600,000	27.0 decrease
Powdered milk	"	11,500,000	16,200,000	41.0 increase
<i>Other Products</i>				
Potatoes	acre	505,900	560,000	11.0 increase
Sugar beets	"	63,300	90,000	42.0 "

(Continued on page 30)



Think What Power Hath Done

 Only one thing keeps this scene from being a picture of your wife, your mother, your daughter. It is not a matter of time, for women still are working like this where the original photograph was taken. It is not a difference in land, for this European field is level, with soil much like that in many sections of this country.

The difference between this farm and those you know is **POWER**. Where earth is turned by human muscle, much or most of the muscle is woman's. Where clumsy one-piece wooden plows prevail, travelers tell of the wife teamed with the ox to pull the plow. Wherever farm work is done the hard way, women and children have to help with it. All the alleged evils of child labor in agriculture are found only in operations not yet done with Power and the implements or machines to apply it.

Every form of Power has brought its phase of freedom to the farm family. Waterwheels set woman free from grinding flour with mortar and pestle.

Tread and sweep powers enabled animals to drive threshers, freed whole families from the flail. Steam power made possible the self-feeder and wind-stacker, did away with dirty drudgery in threshing. Finally came the tractor to lighten labor in field, at farmstead, and even on highway.

Manpower Multiplied

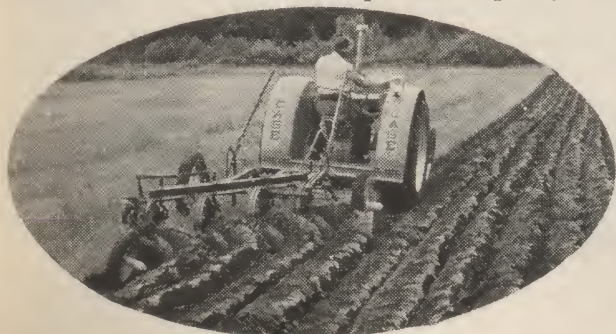
In the time it took to grow and harvest an acre of corn 25 years ago, a man now takes care of two acres. While he produced an acre of soybeans then, he produces over three acres now; with wheat, nearly four acres. These are actual, average results on the same farms, revealed by figures from University of Illinois farm management records.

The difference is that 25 years ago these farms had no tractors; now they have tractors, tractor planters and cultivators, combines and corn pickers. In future farming, power and machinery will multiply man-capacity still more. Already, in Iowa

experiments, corn has been grown and harvested with less than three minutes of man-time per bushel.

Not only did Power bring freedom to the farmer. It was freedom which brought him Power. All the glorious advance of agriculture by the application of Power is fruit of the freedoms which we fight to preserve . . . freedom of thought, of education, of employment, of enterprise. And because the way of free enterprise gave them Power and the machines with which it works, one family on the farm now feeds several other families, furnishes fiber for most of their clothing, and creates a huge surplus for export to foreign lands.

In time of peace those other people are free to provide plumbing and pianos, education and all the material blessings in the New World way of life. In time of war, farm machinery frees men to make weapons and to wield them in the defense of all the freedoms of all the people. J. I. Case Co., Toronto, Ontario.



FOUR TIMES FASTER. Riding the comfort-seat of his Case "LA" tractor, this man turns as many acres as four men with one-plow tractors, or six to eight men with walking plows and two-horse teams. He fits the land to grow crops for making four times as many loaves of bread and quarts of milk, to feed several times as many soldiers and civilians, to buy more war bonds.

Serving Agriculture
Since 1842
in Peace and War

CASE

We Can't Afford to Feed Poor Rations

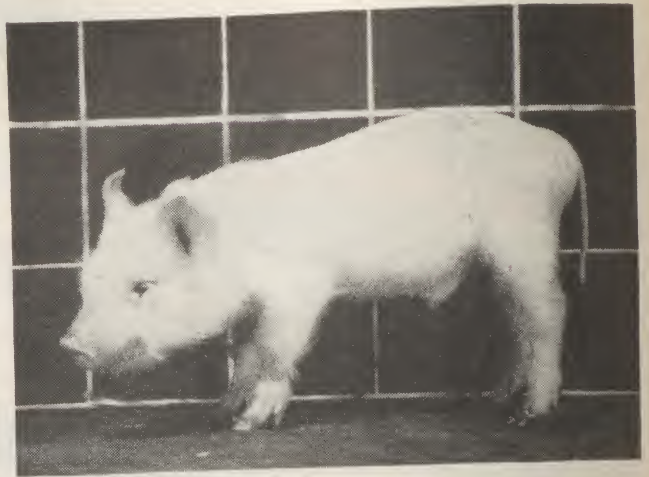
by E. W. Crampton

One cannot examine the records of farm herds and flocks without being struck with the heavy cost to the individual stock owner and to the livestock industry of disease, either directly through the loss of animals or indirectly through lowered efficiency in production and reproduction. Some of this can be traced to infectious and contagious disease. But evidence is accumulating rapidly and in considerable volume that the no small number of conditions involving ill-health are deficiency conditions, the result of faulty rations. Within the past month the American Society of Animal Production held its annual meeting in Chicago. This program was in large measure aimed at problems of wartime economy and the part which the livestock industry could play in meeting the demands for greater supplies of livestock products. In sitting through their sessions one could not help but note the emphasis given by research workers all over North America to the prevalence of, and measures being studied for the correction of these disease conditions of dietary origin.

What are these diseases, you may ask. And here is where one of the troubles begins. It is easy to name and describe the symptoms of such well defined diseases as rickets, anemia, goitre, and scours. But these conditions are now known to represent acute and advanced stages of the deficiency involved. Indeed when one of these disease conditions has developed sufficiently that the case is clear cut, it is frequently too late to be corrected by feeding and perhaps even by specific treatment. By far the greater number of animals that are ill-nourished show none of the specific clinical signs of a recognized disease, but rather are what the feeder may refer to as "poor doers." Their appetites are poor, they lack the bloom of perfect health and vigor; with immature animals, growth rate is below normal.

Unfortunately many feeders do not connect these conditions with ration deficiencies, largely no doubt because they have not suspected either that the ration was imperfect or that the animals were actually suffering from malnutrition. One of the things which it is difficult for many feeders to grasp is the fact that liberal allowances (if eaten) of a ration which is deficient in some essential nutrient will actually cause the appearance of the deficiency disease more quickly than is the case when appetite failure occurs with resulting low food intake. For example animals will live longer on water alone than when consuming rations lacking certain vitamins. The frequently seen case of the best pig of the litter becoming the worst runt from nutritional anemia is another example. The fastest growing animal naturally has the largest need for the nutritional factors and is accordingly the first to show the effects of this absence or deficiency.

That the condition of ration deficiency is widespread in this province is abundantly evident from letters from



A typical pig from a litter in which a poor diet was fed

feeders themselves seeking help with poor doing animals. Reports by nutritionists and veterinarians who have had occasion to visit farming areas agree that conditions traceable to poor feeding are an important source of loss to farms quite generally.

Proof as to whether ration is at fault is easily obtained by the feeder himself. He need only go to the trouble of feeding a properly balanced ration for a short time and note the results. If he is in doubt as to what constitutes a balanced ration, help is available to him through the Agronomes, and the Agricultural Colleges of the Province. Nor does cost necessarily enter the picture. The addition of salt or of limestone to a ration is not expensive. And the cost of iron to prevent anemia, or of iodine to prevent goitre is as insignificant as the results are positive. Any and all of the substances needed to fortify a ration of farm grains against mineral deficiency are easily obtained and may be mixed at home. Vitamin problems are largely confined to those supplied in Cod Liver Oil which is available through most feed dealers. Its cost is amply justified when measured against the losses from such conditions as rickets and scours in young animals.

There is not space in these columns to attempt any detailed discussion of deficiency disease symptoms, their cause, cure, or prevention. A chart has been prepared, however, in which are set out some of the most often found conditions together with notes indicating how they may be related to ration make up. These are not intended to be specific enough to permit more than a generalized picture of the conditions which are known to exist. It is also to be noted that diet deficiency is not the only cause of some conditions, the clinical symptoms of which may in part resemble those resulting from faulty rations. It would seem reasonable, however, to reverse the usual order of reasoning, and to suspect ration weakness first as the underlying cause of the great majority of cases of unthrifty animals on the farm.

(Continued on page 18)

BREED MORE SOWS SAVE MORE PIGS

stop losses of young pigs



Pig marketings during 1943 must be substantially greater than in 1942 if Britain's needs and Canada's requirements for bacon and pork are to be supplied.

If adequate care is given the sow and young litter *one million* pigs otherwise lost each year can be added to this year's marketings.

PIG PRODUCERS ARE ASKED TO MAKE EVERY EFFORT TO REDUCE LOSS

The strength and health of little pigs at birth and for several weeks after farrowing depends to a large extent on the care and feeding of the sow before farrowing.

START NOW to assure strong healthy pigs by providing the sow with:

1. Outdoor exercise every day if possible.
2. Dry, airy, draft free quarters.
3. Sufficient feed to build up a reserve for nursing.
4. Minerals, proteins and vitamins.

For further information consult your Provincial Department of Agriculture, Agricultural College, nearest Dominion Experimental Farm or Live Stock Office of the Dominion Department of Agriculture.

1745

AGRICULTURAL SUPPLIES BOARD
Dominion Department of Agriculture, Ottawa
Honourable James G. Gardiner, Minister

Flour Milling in Relation to Health

by L. H. Newman *Dominion Cerealist*

The story of flour milling is as old as civilization itself. It takes us back to the very beginnings of civilized existence when the milling of flour in its crudest form had its birth, and carries us along to the highly complex and scientific system of centralized milling of the present day.

The first contrivance believed to have been used to reduce wheat to flour was known as the "Hand Stone". Then came the "Mortar and Pestle", followed by the Saddle Stones and the Quern. The last mentioned contrivance was a Roman invention and is said to have been the first grinding machine in which different parts were mechanically coordinated so that they might be operated by power.

The Quern was the forerunner of the stone system of milling which came to be universally used up to about sixty years ago. This system involved the use of two stones. The lower stone was grooved or furrowed while the upper stone, which fitted its mate, had a hole or "eye" in the centre which served as a hopper into which the grain was conducted for grinding. A handle was provided on the Quern for turning the upper stone in order to grind the grain which had worked down between the grinding surfaces, the flour being conveyed to the outer rim. At first the grain passed between the stones only once but later it was reduced by several passages, the flour being sifted from the offals after each passage.

The first Stone Mill to be operated by power is said to have been invented about 70 B.C. In North America the first power driven mill was erected at what is now Annapolis Royal, N.S., in 1605. This was a water power mill although a number of wind-operated mills were built by the early French and English settlers also.

In the early days, and indeed up to the time when the bolting or sifting apparatus came to be operated by power, the ground wheat had to be sifted by hand. With the appearance of the silk bolting cloth, invented and first made by the Swiss about 1835, there quickly developed a highly efficient system of mechanical bolting which yielded a flour of relatively high refinement.

Up to the early seventies the system of milling chiefly followed in North America was known as the 'Flat Grinding System'. By this system the stones were held close together in order to produce as much flour as possible by the one grinding. This system however, did not work out very well when it undertook to grind hard spring wheats such as those grown in North Western America. The grinding had to be *higher* and this gave more and poorer middlings than when soft or winter wheats were ground. This in turn meant a flour of darker colour.

The spring wheat millers then began to devise ways and means of putting the middlings or semolinas into better condition to regrind in order to release the flour



This stone, brought from France about 1610, ground some of the earliest grain grown by white men in North America. It is now at Annapolis Royal, N.S.

which they still contained. The result was the introduction of the Middlings Purifier, an Austrian invention, together with a system of High rather than Close grinding.

The advent of the Purifier together with the modified milling system which it called for, practically revolutionized the milling business especially in North America. It made it possible to capitalize on the intrinsic qualities of the flour made from hard spring wheat, and to produce a flour of the desired whiteness and strength. All of this of course, had a profound effect upon the development of the great spring wheat producing plains of North-western United States and Western Canada. Spring wheat flour almost immediately sprang into favour and quickly won a place when introduced abroad.

The second revolution, and probably the greatest, to take place in the flour producing industry came about as a result of the introduction of the Roller System of milling

(Continued on page 19)

IN 1943 IMPLEMENT MANUFACTURERS WILL BE PERMITTED TO MAKE ONLY ONE MACHINE FOR EVERY FOUR THEY MADE IN 1940 . . . BE PREPARED!



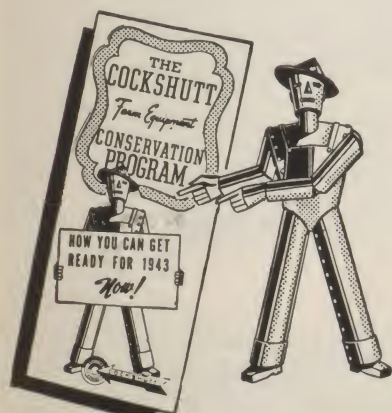
JACK: "What do you mean, you're all set?"

BILL: "Exactly that! I've been getting all my implements in shape . . . Now I just have to hitch-up and go!"

JACK: "Sounds like a lot of work. What's the big idea?"

BILL: "Why no . . . as a matter of fact I just filled in odd hours. I figured it was just good common sense to fix up my equipment while spare parts are still available."

This booklet shows how you can get ready for 1943 now . . . how you can save time, crop and money.



Wise farmers . . . faced with the fact that implement manufacturers can only build 25% of their 1940 production, *and the rationing of all implements by Government control . . .* are getting ready for next year by putting all their farm machinery into first-class operating condition at this time.

Conservation of farm implements is imperative if farmers are going to meet the urgent need of growing more with less labour available.

The Cockshutt Farm Equipment Conservation Program shows you how to get ready *now* . . . shows you how to protect your big investment in implements and machines . . . shows you how, with new genuine Cockshutt parts, paint, grease, oil and spare hours you can put your equipment into A-1 working condition for a long time to come.

In this matter you will find a friend in your local Authorized Cockshutt Dealer. Remember it's his business to help you with advice and service. See him at once, get the details of the Cockshutt Farm Equipment Conservation Program. Ask him for one of the new booklets listing points which should be checked when reconditioning your machines!



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Improvement of Cattle Through Artificial Insemination

by L. H. Hamilton

Artificial insemination is perhaps the greatest single development in livestock improvement during a number of years. Its potential value is indicated by the number of successful breeding associations throughout the United States and, to a lesser extent, in Canada. These associations are scattered over a wide area, include practically all the breeds of cattle and vary in size from a few hundred cows to many thousands. The recent high prices prevailing for outstanding bulls to be used in this way is of special interest to all livestock men at the moment. It should also be noted that some of our breed journals carry advertisements of bulls having sired from six hundred calves to many more, depending on their age and the period they have been worked. The possibilities of this new method seem to have caught the imagination of the public and created a new spirit of enterprise which is spreading far beyond the field of the purebred breeder. In fact it would seem to offer some solution to the scrub bull problem. Since it is comparatively new in Quebec it is the purpose of this article to bring before our readers some of the advantages and difficulties in actual operation.

Advantages

Artificial insemination exemplifies the efficiency and economy of mass production stated one of our contemporaries recently. Through its use one sire may replace many of lower production and type-transmitting ability. By this method any community or area can develop a breeding programme and follow it systematically through the selection and purchase of proven sires of particular lines of breeding. It makes possible the greater use of sires which only a limited few of the highest class farmers can afford. It can be carried on in any community. It may become the most practical method of breed improvement and so popular that we will be forced to accept it to keep pace with our competitors.

The greatest value of artificial breeding is through the greater use of proven bulls. Only those bulls which are proven and younger bulls possessing the greatest indications for the desired characteristics sought should be used. Mature sires are the most effective in service and can ordinarily be counted upon to breed approximately 400 cows per year. By proper feeding and management, young bulls may be used with satisfactory results.

During the month of December a three-day short course on artificial insemination was held at Macdonald College. Representatives from the two beef centres actually carrying on artificial breeding were present as well as others representing the larger farms and the Federal and Provincial Departments of Agriculture. This course, which we believe was the first of its kind in Canada, was quite successful. According to the statement of those in charge it indicated that the average herdsman or farmer can successfully master the technique and it was an excellent medium for the discussion of practical problems connected with this work.—Ed.

Operators

A technician, veterinarian or other skilled operator is required for satisfactory results in this type of work. He should be thoroughly familiar with the anatomy and physiology of the cow and competent to diagnose and treat all conditions involving reproduction. The average herdsman can successfully master the technique and in so doing can widen his sphere of usefulness in the community.

Organization

Before deciding to set up an organization, a survey should be made of the cow population in the district. This is important since the cost of operation is determined by the salary, travel expense and the maintenance cost of the bull. The service fee is regulated by operating expense plus a small amount set aside for sire purchase or replacements. With these considerations in mind the following points should be carefully observed in starting an association: (1) The project should be explained fully, its advantages and limitations; (2) The membership fee should be sufficient to meet all requirements. (3) A sufficient number of cows should be enrolled. (4) Select a proven bull and provide careful management. (5) The bull should be centrally located. (6) Do not extend special breeding privileges to anyone. (7) Employ a technician who has special training in artificial insemination. (8) Establish a co-operative relationship with the local veterinarian so that he will have a full understanding of the Association's progress. (9) Advise the members they should



Ellard Johnston, Alex Russell, John Dougherty and Jim Ross in one of the College laboratories.

not expect a better percentage of in-calf cows than by natural breeding and that bulls vary in their fertility. It pays to be conservative. (10) Keep the members posted in all matters of interest affecting the Association; a periodic news letter may be helpful. (11) All matters of business should be in the hands of a board of directors or management committee. A number of other details might be mentioned but the above will serve as a guide in making a start.

The Future

What the future holds to some extent, at least, remains to be seen. Scientific investigation and practical experience will improve the present day technique. We are only beginning to learn a lot of things about the feeding and management of bulls. It may not be long before through proper nutrition we can double the volume of sperm and increase its viability. It may also be expected that through the improved use of buffer solutions and proper storage a much greater use can be made of a given quantity of sperm. So far as health is concerned, artificial insemination possesses practical value since it reduces immeasurably the risk of spreading disease.

For the large herd this method extends the usefulness of proven sires over a longer period. Small heifers may be mated to mature animals without risk. Herdsmen who practice this method become more interested, intelligent and efficient managers.

Unexpected difficulties may yet be encountered, but so much has been done already that it is the duty of us all to keep fully informed and to be prepared to act when a definite policy is announced.



Members of the short course spent part of their time at the Montreal Stock Yards

A mother kangaroo had patiently scratched her stomach three times, but when the process was to be renewed a fourth time, she snatched two baby kangaroos from her pouch, spanked them and said, "How many times have I told you not to eat crackers in bed?"

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CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

Farm Forums Start Coops

The Farm Forums are going into action this year. Action in earnest. Last year many groups undertook many unrecorded projects as part of their work together. One group bought a carload of hay together "The cheapest buy in the county".

In the Cowansville district several Forums pooled their energies to organize a cooperative creamery. The new cooperative association took possession of the property on December 15th. Guy Shufelt of East Farnham, member of the listening group with the longest continuous history in Canada, is president. The membership is bilingual, and the board members are both English and French.

In November 1942 a list of action projects was distributed to the Quebec Farm Forums. Two of these dealt with cooperation: cooperative purchasing, and credit unions.

Almost every farmer is convinced of the need for cooperative purchasing, even if every farmer may not be prepared to buckle down and get a coop going. But every English farmer in Quebec does not seem convinced of the need for credit unions.

This seems incredible in a province where there are more credit unions than in any other section in North America.

Credit Unions are suggested for farm communities because they put the control of money in the hands of the

farmers themselves. They can make loans as they wish and to whom they wish. Credit Unions encourage thrift. Farmers pride themselves on their thrift. Take a pencil and write out a list of the money lost in wildcat investments by people in your community, or spent unwisely in machinery, cars, farms, and other paraphernalia. Add it up and see if you have enough money to start a "peoples bank". Not one of those investments would have been made if the farmer had had to talk it over with the credit committee of his credit union. Indeed such "investments" are often made without or against the advice of the housewife.

Now as farm prices begin to advance, and there is less opportunity to put the money into needed equipment, the question of where to put the money will arise. Why not a credit union — let the credit union buy bonds now. After the war the farm Community will have a reservoir on which to draw for the purchase of machinery, electricity, power lines, housing improvements.

This winter many Farm Forums will be thinking over the problems of cooperative action. The cooperative bank should be the backlog of any cooperative undertaking. The broadcast on January 25th should spur us on to action in this field.

R. Alex Sim.

Pro and Con with the Co-Ops

"The co-ops are all right as far as they go — but they don't go very far. If there is going to be real reform, political action is needed. I don't think the movement can do much good until it becomes partizan and helps elect the types of men that are needed."

Objections such as this are heard pretty frequently these days.

The Rochdale Pioneers laid down neutrality as to party politics as one of their principles. This means that co-ops — as organizations — do not support any one particular party. And it follows upon the principle of open membership — through which people who belong to different parties are invited to become members of the societies. If the neutrality were put aside, the membership of any given society might very well split in three ways — there being at least three political parties in Canada.

What effects would follow in the business! What new elements of strife and dissension would be given full play

in societies where the chief retarding force is already the spirit of disunity! The good ship co-operation, steering such a course, might very easily go down with all hands on board.

But neutrality does not hinder in any way the average member in supporting whatever party he wishes. As the co-operative movement is a school of citizenship and training in the economic realities faced by the people, the intelligent members will carry over into the counsels of their parties the social outlook and enlightenment which they have gained. This will no doubt influence, in the course of time, their choice of candidates for the seats of power.

Hence it is not true to say that, because the co-ops are non-partizan, they have no significance in the body politic. There is a vast distinction — at least to the mind of this writer — between true politics and partizanship. Anything

that concerns the welfare of the country is, in a broad sense, political but not necessarily partizan. The very essence of politics in the broad and non-partizan sense have to do with such fundamentals as education, social morality and ownership of property by the people at large. For instance, people who have lost ownership of productive property and have no control over access to employment can hardly be said to be politically free. The work of helping to restore ownership is indeed political.

Has not the very default which placed democracy in danger been this: that great questions beyond and beneath politics were left to the party men. In some countries, social reform parties, elected on the most optimistic platforms have fallen powerless before the public apathy. There was no groundswell to make possible their brave new patterns. The techniques of social ownership have not been expanded to anything like the degree needed to make socialization feasible. It was something like trying to put a spire on a church before the foundation and the walls had been built.

When the history of this present period of social revolution is finally written it will be said that the election of socially-minded governments was not the hardest pinch. The grief really began after they were elected.

It's what they have to work with that is mighty important.

What was the fate of the Blum Government in France? (And what since has been the fate of France?) What was the fate of the Ramsay MacDonald Government in England?

No one denies, of course, that socially enlightened men in the political parties are of very great importance. But we believe also that some of the most fundamental reforms in politics must come from outside the parties.

The two phases of action interpenetrate. Both are vital. The wisdom of merging them under one banner has been doubted — by the most experienced co-operative leaders in the country.

—Maritime Co-operator.

MARKET COMMENTS

The month of December, 1942 was an eventful month regarding the marketing of farm products because of the numerous regulations of the Wartime Prices and Trade Board of that time.

Butter

During the month the price of butter was reduced to the summer price of 35 cents per pound. At the same time the bonus on butter was increased from 6 cents to 10 cents per pound butter fat. Butter rationing also started. The ration allowed is one half a pound per week per person. The normal rate of consumption is estimated at about 32 pounds per year or about two thirds of a pound per week. The ration means a cut of about one-sixth in normal consumption. Half a pound weekly is a generous allowance compared with most other countries with the exception of New Zealand.

Milk

The retail price of milk was reduced by 2 cents per quart during December. The price to the producer is maintained at the earlier level the difference being made up by a bonus provided from public funds.

Eggs

The new contract for overseas supplies of eggs calls for an additional half million cases. The recent drop in price is due to the seasonal factor showing that production is now able to take better care of both overseas and domestic demand than was the case a month earlier.

Potatoes

During the month the ceiling price on potatoes was set at \$1.70 per 75 pound bag for grade 1 at Montreal.

Trend of Prices

	Dec. 1941	Nov. 1942	Dec. 1942
	\$	\$	\$
LIVE STOCK:			
Steers, good, per cwt.	9.25	10.55	11.40
Cows, good, per cwt.	6.50	8.20	8.70
Cows, common, per cwt.	4.65	6.75	7.15
Canners and Cutters, per cwt.	3.75	5.70	6.15
Veal, good and choice, per cwt.	13.25	14.95	15.46
Veal, common, per cwt.	11.50	13.45	14.03
Lambs, good, per cwt.	11.25	12.50	13.45
Lambs, common, per cwt.	9.25	10.50	11.45
Bacon Hogs, B.1, dressed, per cwt.	15.15	16.40	16.68
ANIMAL PRODUCTS:			
Butter, per lb.	0.34	0.36	0.35
Cheese, per lb.	0.25	0.20	0.20
Eggs, Grade A large, per doz.	0.34	0.50	0.47
Chickens, live, 5 lb. plus, per lb.	0.19½	0.22	0.23
Chickens, dressed, milk fed, A, per lb.	0.27½	0.31	0.31½
FRUITS AND VEGETABLES:			
Apples, Quebec McIntosh, Extra fancy, per box	2.75	2.50-2.75	2.60-3.00
Potatoes, Quebec No. 1, per 75 lb. bag	1.00	1.25-1.40	1.25-1.55
FEEDS:			
Bran, per ton	29.00	29.00	29.00
Oil meal, per ton	(39%) 49.00	(38%) 44.00	(38%) 44.00

RESEARCH IS THE KEY TO KNOWLEDGE



→ CEROGRAS ←

Natural Green Feed

GREENMELK COMPANY LIMITED, WALLACEBURG, ONT.

Some Problems of Nutrition and Rationing

by Margaret McCready

In an address in May 1942 the Vice-President of the United States, Henry A. Wallace, spoke of the price of free world victory. He reminded his audience of the four duties which must be accepted as the price of the Four Freedoms enunciated earlier by President Roosevelt. Chief of these duties was — the duty to produce to the limit. As Secretary of Agriculture in the days of the destruction of surplus crops, Mr. Wallace must have recalled bitter memories of human want and crop waste, in formulating this obligation of freedom from want. Half in fun and half seriously, he said further: "The object of this war is to make sure that everybody in the world has the privilege of drinking a quart of milk a day". To this statement several powerful reactionaries have already taken exception. In general however, we choose to consider that the century of the common man is on its way and will not be turned back. The world will have to produce sufficient milk for the world to drink.

Increased Food Production in Canada

In Canada, our Dominion Department of Agriculture has shifted from its previous policy of restricted production and high prices to one of greatly increased production encouraged by certain subsidies to the producer. And in addition, under our price control authorities, the consumer is being considered; retail prices of Canadian milk and butter have been reduced. At last, it is being recognized by our government that we need more food available for our own consumption as well as for our overseas customers. With some effective aid in their labour and machinery problems, our farmers undoubtedly will continue to increase production in 1943 as they have in the past two years.

Comments on Rationing and Subsidies

The very recent rationing of butter will continue until it is evident that increased milk production can meet the need for cheese production, condensed and powdered milk supplies and fluid milk consumption. The latter, a small part only of the total milk supply, is expected to increase, due to the two cents a quart subsidy to consumers. The subsidizing of consumption is a new idea to Canadians and let us hope, the beginning of a new era when production will be geared to meet need, not high prices. It has been suggested that the technical difficulties involved in keeping prices fair to producers, distributors and consumers, will become so great that it would simplify matters and be no more costly, if our government would pay the farmers to feed us! Export trade could be handled in addition! In any event, it is apparent that "production to the limit" is now accepted in the realm of food as in all other realms of defence in this war period. It is obvious too, that the need for food will increase as the war draws to an end and the starving populations of the Hitler-dominated world have to be fed.

Meanwhile, the new subsidies declared on several food products will help many Canadian households to use more milk, oranges and meat even though their price is still high; and the lowering of prices on rationed goods such as tea and coffee will leave more money to spend on more essential foods. The housewives of Canada, in their voluntary organization under the Wartime Prices and Trade Board, have been relentless in fighting the suggested rises in milk prices particularly. The recent lower price may be due in no small measure to their constant demand for cheaper prices for this essential commodity. On the other hand, we know that prices of some commodities had to be lowered to hold down the cost of living index which had risen unduly in November. It is encouraging, however, that important foods like milk, butter, oranges and meat should be selected to have their prices lowered.

Consumer Demand and Nutrition

Could not consumer demand perhaps effect other price changes which would promote better nutrition? We know

Growth

May Be Controlled by Diet

Food made the difference
in these twin brothers, 6 months old



This rat ate only meat, potato, bread, and butter. He weighed 89 grams



His bones also show the effect of poor diet



This rat ate plenty of milk and vegetables, besides meat, potato, bread, and butter. He weighed 194 grams



His bones are strong and well formed

NOTES: CHART NO. 2
BUREAU OF HOME ECONOMICS U.S. DEPARTMENT OF AGRICULTURE

that Canadian dietaries lack vitamin B₁ very generally. Could we not encourage our price control authorities to lower the price on the whole wheat and other high vitamin B flours and breads, while keeping the highly refined flours and flour products at a higher price? This method of price control has worked to advantage in Germany. People learn to like the food which answers the purpose and is cheaper. In this instance, they obtain much better nutrition at the same time. A great deal of time, thought and expense have been put on the production of "Canada Approved" and enriched flours and breads whose content of vitamin B is high. In order to have these plentiful grain products utilized to the fullest extent some form of price control in their favour would help, as well as wider publicity and education of the public.

American Food Stamp Plan and Free School Lunches

Our Canadian consumers may become insistent enough some day to ask their government to sell off so-called food surpluses to the needy as is done in the United States by the Agricultural Marketing Administration of the Department of Agriculture. By a system of special blue stamps issued to authentic relief recipients or low income families, the current unsold foods on the market are sold more cheaply to holders of special food stamps which have thus provided extra buying power. The stamps are redeemed by the local banks whom the government in turn reimburses. Communities are encouraged to sell the idea to the grocer and put the Food Stamp Plan into operation. Similarly, communities are encouraged to utilize the so-called surplus foods in providing free school lunches and penny milk. The administrator of this scheme has said: "If we can afford several hundred dollars a year to educate a child we can afford ten dollars a year to keep that child physically fit for study". When, in Canada, we have a good crop of apples and are unable to export to any extent, some scheme whereby our own needy families could buy this food at reasonable prices, would be welcome. Any of the various processing schemes used to preserve the apple crop, such as canning, dehydrating or making into juice, always adds to the cost of the food and makes it less available for most Canadian homes.

At this point we should remember that sixty per cent of wage earners in Canada receive less than \$1,000.00 per year and consequently must expend a very high proportion for food. Before 1941, food prices had risen, certain ones particularly, since August 1939, by 24.1% and have risen more than any other commodity since price control. Those families in the lower income brackets who do not receive a cost of living bonus must be experiencing great difficulty in meeting their food needs.

Some British Experiments

Our neighbours to the south have suffered even more than we in Canada from inflationary prices. However, because of their Food Stamp Plan and schemes for free school lunches, millions of their children will be pro-

tected against inadequate food supply. This has been the great aim in Great Britain also, to see that in spite of a devastating war, her civilians as well as her armed forces shall be able to eat sufficient and certain types of food. In the first year of this war a scheme was instituted whereby pregnant and nursing mothers and infants under five years of age were assured of one pint of milk daily, free of charge, if need be. Free milk schemes and school lunches had been more widespread for needy school children than in our country. Since the outbreak of war "British Restaurants", under government control, have been providing cheap yet nourishing meals to great numbers of working people. Many of these people are learning for the first time the taste of raw fresh vegetables as cheap fresh salads are being promoted by "British Restaurants". The cause of better nutrition for defence workers must be aided when every factory employing over two hundred and fifty workers is required to have a canteen providing a hot well-balanced meal at low cost. Our own new Nutrition Services at Ottawa have been investigating the food needs of workers in industry and encouraging the support of workers and employers in better nutrition. Meantime there is no scheme here providing all pregnant and nursing mothers and infants, needy or otherwise, with one pint of milk daily and it is usually difficult to persuade a factory worker to drink milk if his home folks lack it. Already in Britain a few demonstration family allowance schemes, whereby a worker receives additional pay as his family increases, have shown that great improvement to nutrition comes when more money is available for food.

Food in a Free World

The various plans and price controls discussed are all ways of improving the nutrition of a nation. In addition, the rationing we have had so far in this country should have a beneficial effect on health. Cutting sugar, tea and coffee consumption should leave more money available to supply more protective foods in the diet. In these days of Beveridge Reports and New Deals and with the promise of an Atlantic charter giving freedom from want, we in Canada must be alert to the promotion of plans to help accomplish these ends for ourselves and others. As one of five or six countries having a net export of food we must see to it that we feed ourselves properly as well as export.

If we are really serious about food being an important weapon of defence and conquest, we will support the nationwide nutrition campaign now in progress. With better nutrition we can look forward to having fewer rejections of recruits for the armed services, to better infant and maternal mortality figures and in general, to a stronger and happier race.

Two farm hands wanted a holiday and one of them approached their employer.

"Hoots," said the farmer, "a holiday—why, it's no many weeks since ye had the two meenits silence."



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

A NEW YEAR MESSAGE

from the Provincial President, Mrs. E. H. Dow

A Happy New Year to Institute Members and to readers of this section of the Macdonald College Journal. This is a sincere wish and the best of it is that each of us may have a part in making it come true.

As 1943 opens, we realize with thanksgiving that we are a year closer to the end of the present world conflict. We were not ready for war; we are not ready for peace. There are certain things each individual must do to prepare for peace and in the doing of them we shall find happiness this year.

To begin with, let us cultivate the spirit of "good neighbouring" in our own community. Perhaps nowhere else is there greater need for the development of kindness and good-will in rural communities than in this province of dual tongues. This leaven of "good-will to men" has a chance to spread around the earth through the world-wide organization of which we form a part. This does not make us pacifists. In families, the unruly child is disciplined; in states, the criminal is punished; so we expect those who have brought tragedy upon the world to pay the penalty for the chaotic conditions that war causes.

Then let us apply ourselves to the "bettering" of our community. Shortage of man power and of machine parts makes this an excellent year to put into practice co-operation in farm work. Shortage of teachers makes consolidation in rural areas a necessity and this in turn brings closer the creation of the larger administrative units. Shortage of doctors and nurses gives us the needed incentive to seek Health Insurance in our community, while shortage of certain foods opens the way for us to adopt the principles of Nutrition in our homes.

More than all else, let us remember our young people. In the past twenty-five years we have lived through post-war, depression and pre-war periods the like of which we would not have the coming generation experience. *Now* is the time for us to plan a place in community life for every young man and young woman who will be demobilized from the armed forces or liberated from industrial labour. Our rural communities need our young people. It is for us to prepare a place interesting enough to hold them upon their return. Surely in doing so we shall find happiness this year and for the years to come.

LET'S ALL PLAY THE GAME

by Grace A. Kuhring

There is always something inspiring about a beginning; a new day, a new month, a New Year.

The good news coming to us from our battle lines, gives us an added inspiration as we start the New Year 1943.

We know that we shall have a long and a hard fight ahead before Victory is won, but we are determined that we shall win that victory.

Goethe said that life was like a game of whist; the cards are dealt out to us by the Unseen, and it is left to us, whatever may be the nature of the hand we hold, to play it as well as possible. Surely it is not the kind of hand given us by the dealer that determines our character; our character is shown wholly by the way we play.

Life is not only like a game, it IS a game, the most fascinating and complicated of all games.

In the past each individual played his hand, about as he pleased, at many tables, large and small, here and there. Throughout the world, games were played by individuals, knowing little about each other, and probably

caring little, on the whole.

But the game has changed. It is now one big game, WAR, in which every player in the world is asked to take part, to choose sides and to play 'all out' to win. A game of action, no longer played with cards, a new game, with a new rule to us . . . total war.

The other side, the Axis, with its cruel and ruthless leaders take measures to make their players obey this rule, which are unthinkable from our standpoint.

Whether we like it or not the rule is there and we must play by it. We have been powerless to change it.

Either by the same ruthless measures used by the Axis, or by other means, we must fight total war and we must have total co-operation from every player on our side, there is no other way.

Every one of us can, and must, help, no matter where we are.

In our homes we can salvage every bit of all kinds of materials needed by our war plants, and we must see to it that we make the effort, after we have collected that

salvage material, to deliver it where it can be used. The job is not done until that arrangement has been made.

We must learn to use substitutes and avoid all unnecessary buying.

Make no mistake about it, there is no product bought or used by any one of us that does not affect the war effort. When we buy a loaf of bread, a pair of shoes, a dress or a tin of fruit, we are buying more than supplies for ourselves and our homes. We are buying the services and use of materials, men and machines. The food we eat, the clothes we wear, the things we buy and the things we use, all these are as much a part of the war effort as guns, tanks, ships and aeroplanes, so we must not waste them.

Soldiers, Sailors, Airmen, Agricultural Workers, Munition Workers, and others are needed. There is a shortage of manpower. This can only be overcome when every individual in Canada, puts his 'cards' aside for now, and takes his place in the one big game that matters.

Someone else cannot do our part for us. Everyone has a part to play and everyone must play his part if we are to remain free and worthy of this Canada which we are still fortunate enough to call OURS.

DETOURS IN LIFE

by M. Elizabeth McCurdy

A trip across country is rarely undertaken without the traveller coming sooner or later to situations which are expressed by a term newly sprung into general use, and known as "detours." The highway, smooth and comfortable for driving, must perforce be left and the uncertainties of mud, ruts and sudden descents encountered and passed before the way stretches out once more in level surfaces, carefully planned curves and the elimination of all possible hills.

Human life, too, must make detours and adjustments. Few there are who are carried to their appointed destinations on "flowery beds of ease." Sudden jolts, stops and starts occur in spite of every care to carry on a well-planned existence. Detours must be accepted and endured at whatever expense of time and patience may be required.

A very large number of people are being faced with detours in life at the present time. The New Year will see thousands whose plans have had to be altered and who will have to adjust their lives to new ways and means of existence. University and College students, boys and girls from the High Schools, lawyers, clerks and stenographers are leaving the familiar scenes of their activities and are taking their places gallantly in the nearest approach to a total war that the world has ever seen. What destruction of hopes, what wrenches of parting, what mustering of courage to face a strange and menacing future only these victims of circumstances can ever fully understand.

It is not easy for those who must make detours to realize anything profitable about them. On the face of it

detours are a nuisance to be met and passed as soon as possible. But the thoughtful mind will not regard them entirely in that light. The traveller sometimes finds that the rough track lies through the most beautiful and interesting part of the country side. The enforced slowing of speed lends itself to a better view. The monotony of the drive is broken. And more than this, the driver becomes more skilled in the handling of his car. He develops confidence and independence in his task.

In life, too, detours serve a purpose. Life is in itself just one long period of adjustment, and he or she who will not bend must break. To be able to adjust oneself to any circumstances is the hall mark of greatness. To face life with a proper attitude towards its every varying phases is the truest success. Present days call for speedy adjustments, and even more the future will so call. The power to make these adjustments smoothly and thoroughly will be a great asset in a world where so much that is of value has been destroyed.

Those who live to see the return of sanity in a world which seems to have gone mad will need a reserve of quiet strength which will serve not only themselves but to help to restore the balance of a threatened civilization.

HOME ECONOMICS

by M. L. Kezar

"Home is the place where all the battles will be won, where freedom will be born anew in travail, and selfishness will die in a lonely bed; where courage will be pieced together out of old materials, and sacrifice will not come as a stranger but as an honored guest whose worth is recognized. Home is the place where America will hold her rendezvous with Destiny." (Margaret Cousins.)

At this period of sacrifice and struggle which our country is experiencing this quotation cannot fail to convince us of the enormous task and responsibility that must rest upon the home-makers of our nation. Many good results are evidence of the fact that the country is facing the situation with real courage and determination.

To those who may find it difficult to meet the emergencies which may occur, the following suggestions may bear fruit:

1. We should strive to know the facts concerning the world crisis and assist others in understanding the situation in other nations as well as those of our Empire and our own country. It is well to know something of the vital factors of national and international affairs in order to help in our own line of defence.

2. It is necessary to make a practice of doing things well, in other words to develop skill in all home activities. This eases the monotony and makes home life more attractive to all members of the family, as well as to others with whom contacts are made.

3. It is urgent that an interest be taken in some phase of social welfare work, such as health and diet clinics, school lunches and recreations. This will prove to be a great help in improving the community, especially if women from every social group are included, thus creating a community interest.

4. Since the health of a nation depends much upon nutrition, it is well to know as much as possible about food values and food substitutes in order to give the family well-balanced meals, as well as to be prepared in case of emergencies, such as shortage of certain articles of food.

5. The family budget should be carefully considered and intelligent buying practised at all times, as well as assistance given to others along these lines.

6. Above all things, we must avoid hysteria in buying, that is, we must not hoard. This is not likely to occur if we consider that others have similar problems, and it is

the right of every one to have a share of what the country can provide for the sustenance of the population.

7. Then we must make sure of facts and not repeat rumours or spread stories about food shortages. There will be time to meet such emergencies when they arrive if we prepare ourselves. There should be a sufficiency for all if they are distributed properly, and even if we should have to do without a few commodities there should be a will to make the best of things for they are trivial when compared with the deprivations which many other nations are experiencing to-day.

Our line of defence will be strong and secure if we heed the following: "Home is the place where every American must understand the importance of husbanding energy, building health and strength — strength of body, mind and spirit — against whatever lies in wait."

(Margaret Cousins).

Q.W.I. NOTES

Red Cross and war work continue to be the driving forces in Quebec Women's Institutes in almost every Branch. Autumn and winter needs of the Services have been very urgent, and many other legitimate occupations have had to be curtailed to meet the needs of the men who are fighting for home and country.

Argenteuil County.

Brownsburg sent 22 parcels to boys in the Forces and a Nursing Sister. Ditty bags were filled for the Navy and 5 quilts completed for the Red Cross. Frontier and Jerusalem — Bethany Branches each finished 2 quilts for the Red Cross, and Mille Isles packed 10 boxes for soldiers and one for a nursing sister overseas. Morin Heights and Frontier packed comforts for the armed forces.

Principal D. Staniforth of Brownsburg arranged for three films for the W. I. there, these including "Churchill's Island", "Adjusting Your Life Work" and "The Story of Coffee". Real co-operation was carried out between the Lakefield Branch and the local Farmer's Club, when the former catered for a turkey supper to about 120 members and guests. Morin Heights is serving hot school lunches during the winter months. Pioneer donated \$5.00 to the Children's Memorial Hospital. An interesting lecture was given by Rev. B. J. Thorpe in the meeting of this Branch.

Bonaventure County.

The subject of study in New Richmond Branch was "Books", a splendid paper being given by the treasurer. Ditty bags for the Navy were arranged for. Fifty-five book prizes were given in the School to pupils leading in last year's work, and War Stamps in the County Contests. The Branch at New Carlisle had a busy season; War Savings Stamps were given to the pupils of the High School as prizes, and the members contributed \$21.00 to help fill 12 Ditty bags for the Navy; these were well filled with comforts and shipped early in the Fall.

Huntingdon County.

Huntingdon Branch responded to the appeal from the Navy for ditty bags with a donation of 6 bags. An interesting paper on the life of Florence Nightingale was given by Mrs. F. Bruce, and the guest speaker of the day, Rev. Mr. Knowles, addressed the meeting on Remembrance Day, in which he emphasized the need for more exalted living and of recognizing enemies nearer home, and of fighting these. Aubrey Riverfield had a discussion on Mrs. Roosevelt's visit to England and on welfare and health. Howick sent \$30.00 to the Navy League to help fill ditty bags and heard a paper on Democracy. A discussion on food rationing and health followed. Dundee discussed Winston Churchill's career.

Richmond County.

Richmond Hill Branch sent \$14.00 in cash to the Red Cross, also 2 wool quilts and packed boxes for overseas. Melbourne Ridge had a busy and profitable meeting. Christmas boxes for overseas boys were planned, six ditty bags sent for to be filled immediately, six leather vests for seamen to be made, quilts made for the Red Cross, and a donation of \$5.00 sent to Sherbrooke Hospital. An exchange of gifts was carried out among the members. Spooner Pond had a discussion on Democracy, and discussed international affairs.

Rouville County.

Abbotsford Branch contributed 47 books for the sailors at St. Hyacinthe, and donated 27 jars of jelly to the Montreal Diet Dispensary. Eight special War Savings Stamps folders have been handed in by the members. The twenty-three members present answered the roll-call with quilt blocks. A programme of interesting readings was given during the meeting.

Sherbrooke County.

Ascot Branch gave War Savings Stamps as prizes in each Grade in Ascot Consolidated School. Arrangements

for diphtheria inoculation were discussed. Five well-filled ditty bags were sent to the Navy. The programme included one-minute speeches by the members on drawn names of places and people in public affairs at present. A quiz proved interesting and instructive. Lennoxville Branch members were doing Red Cross work during the meeting. It was decided to make several more leather vests for seamen during the winter. A quiz on: Do you know your Canada? was instructive. Two dollars were given in prizes in the High School. Orford Branch sent 9 pairs of knitted goods to the Red Cross. Cherry River gave a baked bean supper, and sent the proceeds in Xmas packages to overseas boys. A party for the children was arranged by the Branch.

Stanstead County.

This County held its quarterly meeting at Stanstead North in the W. I. Club room, the County President, Mrs. Daintrey, presiding. A report of the Annual undertaking of the County at Ayer's Cliff Fair was given, when 1400 meals were served by members and friends of the County W. I., the proceeds amounting to \$355.00. Of this amount \$135.00 was given to the Navy League, \$100.00 to the Queen's Canadian Fund, and \$100.00 to the Russian Relief Fund.

A motion to confer with the proper authorities on the spraying of orchards was carried. It was announced that First Aid Classes had been started in North Hatley and Ayer's Cliff. A sum of money was voted for school prizes. Three past Presidents were present, Mrs. W. Holmes, Mrs. W. W. Abbott, and Mrs. J. Lebaron, and each addressed the meeting briefly. This was an all-day meeting, a bountiful lunch served at noon by the entertaining Branch adding to the enjoyment of the day.

Pontiac County.

The Women's Institutes of Pontiac County sponsored an annual Farm and Home Beautification Competition with the co-operation of the Farmer's Magazine, Toronto. The supper-banquet which followed the competition was served in the hall of the United Church at Bristol, the Women's Association catering. The County President, Mrs. W. J. Murray, presided and toasts were proposed and responded to, several special speakers being on the programme. A generous prize list was a feature of the competition, the gate signs being the gift of the Farmer's Magazine.

Beech Grove Branch had a paper on Women's Rights, and a discussion on the storing of winter vegetables. Elmside heard a talk on bulb planting, followed by a sale of house plants. Clarendon Branch had an address on the Welfare of the Child by Mrs. R. E. McDowell of Shawville. Shawville Branch met in the High School, the Household Science teacher, Miss E. Barss, giving a demonstration on salads, and this was followed by a paper on Home Economics. Wyman Branch, as well as all others in the County, is packing boxes for boys overseas. This

Branch has sent 14 sewed and 16 knitted articles to the Red Cross during the past few weeks. Wyman entertained the County meeting, when the work of the W. I. was discussed from a national and international viewpoint.

Seeds for Britain Again Needed

The Women's Institutes of Canada have received a request from sister organizations in Britain for garden seeds for 1943. Each year since the war began generous supplies of seeds have been sent from Canada and the New and enthusiastic reports of what these have meant have England States to meet the need in England and Scotland, and enthusiastic reports of what these have meant have come back, also the request that the supply be continued. Seeds for this purpose should be sent as soon as possible, not later than January, as gardening there commences sooner than it does in Canada.

War Tomatoes Replace Roses

In the glasshouses where roses and carnations bloomed in peace time, British flower farmers hope to produce this year 50,000 tons of tomatoes. They are also growing great quantities of outdoor food crops.

One nursery alone, whose output in 1939 was entirely of cut flowers, produced last year 950 tons of tomatoes, 125,000 lettuces, 320 tons of sugarbeets, 100 tons of onions and 75 tons of carrots, all from glasshouses or from land previously planted with flower crops. This year 82% of the nursery's total glass area is planted with tomatoes and 80% of its outdoor ground is growing food crops.

Since the war Britain's flower industry has been controlled by horticultural cropping orders and its employees are reserved at the age of 30 only if they are engaged on food production.

—C. S. T. A. Review.

Take Time

Take time to live. That is what time is for. Killing time is suicide.

Take time to work. It is the price of success.

Take time to think. It is the source of power.

Take time to play. It is the fountain of wisdom.

Take time to be friendly. It is the road to happiness.

Take time to dream. It is hitching your wagon to a star.

Take time to look around. It is too short a day to be selfish.

Take time to laugh. It is the music of the soul.

Take time to play with children. It is the joy of joys.

Take time to be courteous. It is the mark of a gentleman.

—The Creamery Co-operator.

(Continued from page 4)

Summary of some common disease conditions in farm animals traceable to faulty diet or remedied by ration adjustment.

"Disease" Conditions	Its relation to ration	Corrective and Preventive Measures
Calf Scours: scours in suckling pigs.	Deficiency of Vitamin A, nicotinic acid and sometimes of Vitamin C. (i.e. in mother's milk). Sometimes caused by overdosage of iron compounds.	100 milligrams each of nicotinic acid and ascorbic acid, plus 1 gram of a fish oil of high Vitamin A potency, given daily for a week or 10 days. The inclusion of cod liver oil in the ration of pregnant sows is a preventive measure.
Impotency in bulls	Related to intake and/or utilization of Vitamins A and C.	Administration of ascorbic acid and improvement of Vitamin A of regular diet. (note: Vitamin E has not been found an effective remedy). Bright green hay is the best source of Vitamin A for cattle.
Milk fever	Probably not caused by or related to ration.	Daily oral administration of irradiated yeast for three weeks before calving. The high Vitamin D causes mobilization of calcium from the bones.
Bloat	Presence in the rumen of fermentable material which lacks coarse irritating physical nature.	Inclusion in the diet of coarse hay, or of weeds, straw, etc. along with the bloat producing feed as immature lush alfalfa.
Nutritional anemia in suckling pigs.	Iron deficiency in the milk	Access to soil fortified at the rate of 1 ounce ferrous sulphate to 150 lbs. oil. Provide 5 lbs. per litter. Or direct administration to pigs during first week of age, of reduced iron, ferrous sulphate or iron oxide. (Use what will easily stay on a dime.
Birth of hairless pigs: calves with big neck; lambs with goitre; foals or calves with joint ill.	Deficiency of iodine in ration of pregnant female.	Feed 100 milligrams potassium iodide daily during gestation period, (one tablespoonful of a solution of 1 oz. potassium iodide in 1 imperial gallon of water), or use iodized salt.
Rickets: rheumatism in pigs or calves.	Shortage in ration of enough calcium and/or phosphorous and probably also of Vitamin D.	Provide a mineral mixture containing adequate calcium and phosphorous: also supply Vitamin D excepting to animals out doors during summer.
Unthrifty young animals	May be result of too little feed or of use of rations deficient in proteins, minerals, and/or vitamins.	A general check up on the rations fed with particular reference to their content of the so called "protective foods".

CHECK FARM EQUIPMENT

An appeal to all farmers to carefully check farm equipment has been sounded in a statement for the press by H. H. Bloom, Federal Administrator for Farm and Construction Machinery. Mr. Bloom says:

"I would urge every farmer to carefully check over his equipment and to order the needed repairs promptly. Owners should see that their equipment is put in good working order. On the other hand, do not buy surplus supplies of repair parts as this is in contravention of the regulations of the Board which makes it illegal to buy parts other than those actually required for the maintenance and repair of machines.

"By thoroughly overhauling or having old machines rebuilt, farmers can greatly extend the working life of their present equipment. It is in their own interests to make their equipment do as much work and last as long as possible, in order that the agricultural production programmes of the country can be maintained, despite the limitation in supply of new equipment and the shortage of experienced farm help.

"There is little doubt that 1943 will present problems and disappointments in relation to the producers farm equipment and repair needs, but — because of the conditions responsible for them, we know the farmers will understand, and we have a deep and abiding faith that no

hardships, no handicaps will keep them from successfully handling their essential jobs in the production of food and in this way do their part in carrying the Nation to eventual victory."

We in Canada are not expecting bombing raids in the near future. Nevertheless, the Health of Animals Branch at Ottawa is not leaving anything to chance, and has issued some suggestions as to what to do if bombs start dropping. Here are some of them.

Live stock should be scattered in the fields during bombings. They should never be shut in barns, where they could easily be trapped by fire. Enemy pilots are more likely to loose their bombs on farm buildings, rather than on open fields. In the event of gas attacks, animals should be kept away from low ground, where gas settles. They should not be allowed to drink from pools of standing water until the water can be checked by gas authorities to see if it has been contaminated.

A floor walker, tired of his job, gave it up and joined the police force. Several months later, a friend asked him how he liked being a policeman. "Well," he replied, "the pay and hours are good, but what I like the best of all is that the customer is always wrong."

FLOUR MILLING . . .

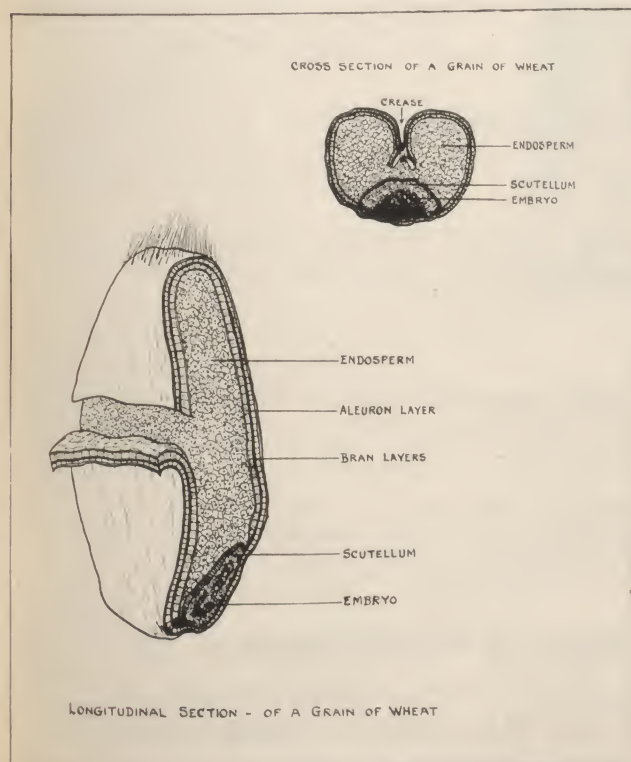
(Continued from page 6)

and the automatic reduction system. This took place roughly in the decade from 1880 to 1890 and modern milling methods may be said to have had their birth during that period.

The Roller System as commonly operated is designed to effect an extremely fine separation of the branny covering of the wheat kernel from the inner floury portion, or endosperm. Some idea as to how this is accomplished may be obtained by following the steps taken in the production of flour as briefly submitted below.

The first step in milling is the cleaning of the wheat. After all loose dirt, weed seeds and other foreign grains have been removed the wheat is usually washed and quickly dried. Water is then added in more or less definite amounts to bring the moisture content of the kernel usually to about 15%. This toughens the bran and facilitates its separation from the rest of the kernel. The germ is also softened and therefore is more easily flattened, in which condition it is more easily separated from the flour while the endosperm, when given the optimum amount of moisture, is more thoroughly purified before being reduced to flour. This process of moistening the wheat and preparing it for grinding is known as *conditioning* or *tempering*.

And now the grinding process begins. The conditioned wheat first passes between a pair of steel rollers having horizontal corrugations, and rotating at high speed. As one roller travels faster than the other a shearing action is produced, causing a partial separation of the outer covering or bran and breaking up the kernels into small granules known as semolina. These rollers constitute the "first break rolls".



This partially ground material is then divided into a number of fractions by sifting, the largest particles being directed to the "second break" rolls for further grinding. Any fine material not requiring further grinding is carried to a certain point in the mill where it is blended later with similar streams. The particles of intermediate size are carried to the "purifier" which divides them into several portions by the aid of air currents, sieves and specific gravity.

Most of the branny particles go off into the feeds while those which are practically free from bran go through a series of smooth rolls until practically all is ground into flour. Other particles to which a certain amount of bran still adheres is further processed until a complete separation is effected. In this system of gradual reduction as many as 8 or 10 pairs of smooth rolls may be used, these being preceded by 4 to 6 pairs of "break rolls".

In our large modern mills there may be 25 or more distinct flour streams as well as several feed streams. The latter are composed of those separations which give us our bran, shorts and middlings. In many mills a certain amount of 'pure germ' also is separated off for a special trade.

Since the flour streams are composed of varying proportions of different parts of the wheat kernel, and since the latter may vary markedly in vitamin and mineral content as well as in physical properties, the former naturally will differ in these respects also. Thus those streams which originate chiefly from the floury endosperm and are freest from germ and branny particles are found to be very low in ash content. Unfortunately, they are also low in vitamin content. It is from these streams that we get our so-called "first-patent" flour which has long been regarded as representing the highest degree of refinement and whiteness in flour.

When all flour streams of good quality and colour are thrown together with practically nothing removed except those streams of 'low grade' we have what is known as "straight grade" flour. This flour represents an extraction of about 75% and each pound may carry from 225 to 250 international units of thiamin chloride which is the chemical name for vitamin B1. Incidentally the flour commonly used by commercial bakers and which is known as 2nd patent flour, has been found to contain about 160 i.u. of vitamin B1 per pound in the average. This represents an extraction of about 70% and therefore carries less of those parts of the kernel which are particularly rich in vitamin B1. Where all of the products of wheat milling except a very small per cent. — usually 4 or 5 — of the very coarsest of the bran, are retained as flour, we have our well known "whole wheat flour". This flour naturally carries practically the same vitamin and mineral content as does the wheat itself. It represents therefore the highest grade of flour made in Canada, from a nutritional standpoint. A recognition of this fact by public health authorities explains in part at least the interest taken by these people

(Concluded on page 31)

STRIPPINGS

by Gordon W. Geddes

Well, we got another example of frozen assets this morning. This time there was plenty of water in the tank overhead but the pipe-line was frozen. It might also demonstrate how important communication lines are to an army. Plenty of supplies at the rear are no good unless enough can be brought up to the front line. In our case two lanterns and an oil-heater broke the blockade. A cold wave was the cause of it all and I do mean cold! It started several days ago and reached a climax (we hope) last night when it was 26 below with the wind howling and dropped to 40 below this morning only the wind dropped too. Our water system wasn't the only thing that got caught in it either. The wife and I started for town with a double team right after daylight on the day it began. We got back home at 6.15 with the thermometer at 14 below and a howling wind. It made us think of Hitler's cohorts in Russia and what a good old Russian winter might do to them if they weren't well clothed for it. Here's hoping!

We should have known when we had such warm weather this fall that we'd have to pay for it. The average temperature for a year runs fairly even so an extra warm spell is usually balanced by a super chill. That's the trouble with inflation too. Extra high prices are followed by extra low ones which hurt more than the former help. So we don't care for any. Still we're not sure the subsidy system is the way to control prices. It seems more like an attempt to mix politics into price control so as not to offend certain classes of voters. Special powers given the government in wartime offered the opportunity to freeze wages at reasonable levels and then allow farm prices to reach parity before freezing them. Certainly wages didn't need to go up until all prices were at their level. Instead the cost-of-living bonus was sneaked in so that prices caught below parity couldn't catch up except by the subsidy route. Thus those whose products were caught below parity must help to pay the subsidy on their own goods. Besides that they may have to help subsidies on articles they do not use themselves in order that those who use them may buy at a lower

CANADA NEEDS FATS & BONES FOR HIGH EXPLOSIVES

Here's a Day-to-Day War Job for You

There is a serious shortage of Fats and Bones in Canada and the only way in which this shortage can be overcome is by the day-to-day saving of every spoonful of dripping, every piece of scrap fat and every bone, cooked, uncooked or dry.

Fats make glycerine and glycerine makes high explosives—explosives to bomb the Axis partners—Adolph, Benito, Tojo, sink their U-boats, destroy their tanks.

Bones produce fat. Also glue for war industry.

HERE IS WHAT YOU DO

Save every kind of waste dripping. All may be mixed together. Strain through an ordinary metal strainer into a clean wide-mouthed can. Do *not* use a glass or paper container. Keep in a refrigerator or a cool place until you have collected a pound or more. Save all pieces of left-over scrap fat from your meats (cooked or uncooked). Keep separate from your drippings. Keep scrap fats and bones in a cool place.



HERE IS HOW TO DISPOSE OF FATS AND BONES

The Meat Dealers of Canada, as a patriotic effort, are co-operating with the Government in this all-important war work by contributing their collection facilities. Now you can dispose of your Fats and Bones in any one of the following ways:



- 1 YOUR MEAT DEALERS** will pay you the price established for your fat dripping and for your scrap fats. You can keep this money for yourself or—

- 2 YOU CAN TURN THE PROCEEDS** over to your local Voluntary Salvage Committee and/or a registered local War Charity.



- 3 YOU CAN DONATE** your Fats and Bones to your local Voluntary Salvage Committee in any place where they collect them, or—

- 4 YOU CAN CONTINUE** to place out your fats and bones for collection by your Street Cleaning Department where such a system is in existence.



Every spoonful of dripping, every piece of fat and every bone, cooked, uncooked, or dry, must be saved. It's a day-to-day job. Your contribution may seem small and unimportant, but even one ounce of fat dripping per person per week will give us 36,000,000 pounds of Fat each year for glycerine.

Canada Needs 40 Million Pounds of Fat

THIS CAMPAIGN IS FOR THE DURATION OF THE WAR
DEPARTMENT OF NATIONAL WAR SERVICES
NATIONAL SALVAGE DIVISION

price. For example take the payment of tea, coffee and oranges. Those who drink little or no tea or coffee must help pay for those who drink all the ration will allow them and then get a little more from restaurants. The family who get oranges only at Christmas help those who have them every day. The government should forget politics and have the courage to put parity prices into effect and hold them there.

Speaking of holding we got hold of a Fifth Columnist the other day. It was a rat (all Fifth Columnists are of course) but this was a real four-legged one and he sure was a big one. Probably he was the one that stole our store of Edible Soy Beans and the Vitamin B-1 made him grow. He did have the decency to steal them from the pod so we managed to save the trouble of shelling them. Anyway we'll have to see that the rats don't get any more of them or we'll have to feed the cats better. Otherwise the rats will be stronger than the cats and it will take two cats to handle one. Rats are often used for dietary experimentation but we'd rather take someone else's word for it and eat the beans ourselves.

I wish there were trained foresters in Quebec available to advise the farmers on the matter of cutting timber. There seem to be a great many trees in our woods which should be removed, so many that we hesitate to take them all without an expert opinion on the subject. In Ontario such advice is obtainable, partly because deforestation there has reached a stage where stricter attention to forests is necessary. But why couldn't we get started in Quebec before things get that bad? There is one young farmer near here who would like to talk to such a man. His ambition is to gather sap from a maple bush which he had planted himself, which means he'll have to get started soon or live to be an old man. My own desire is to see maples growing where there are now scrub hemlocks. The way to bring this about is what puzzles me but it seems as if it would require fencing the woodlot so the cattle couldn't eat the young

maples as they start. Of course the hemlocks now growing would have to be removed and more prevented from starting. Removing the seed trees should take care of the latter for even a hemlock can't grow without seed.

A sultan at odds with his harem
Discovered a way he could scare;
He ordered a mouse,
Set it loose in the house,
And started the first harem-scarem.



SHUR-GAIN PIG STARTER

**Cuts feeding costs...
assures bigger profits**



Feed the SHUR-GAIN way and be assured of bigger hog profits. At 3 weeks of age start your little pigs off right by feeding them SHUR-GAIN PIG STARTER. It contains just the right quantities of vitamins, minerals and proteins to supplement the sow's milk supply. Your feeding costs will be cut and your pigs will grow into healthier, better hogs in shorter time.

**LET'S TALK IT OVER
WE CAN SHOW YOU HOW!**

**CANADA PACKERS LIMITED
FEED DIVISION**

MONTREAL TORONTO WINNIPEG EDMONTON



TO STOP COUGHS MATHIEU'S SYRUP

**IS WORTH ITS WEIGHT IN GOLD
ON SALE EVERYWHERE**

**BUY More and More
WAR SAVINGS
STAMPS**



**Canada West Indies Molasses Co. Ltd.
MONTREAL**

Cream Separator "Ifs" to Avoid

1. If the valve on the supply tank is not open wide the separator will be underfed, and a small amount of high-testing cream will result.

2. If the milk is cold the cream will be too thick to flow readily, and a small amount of rich cream is obtained.

3. If the separator is dirty and the cream outlet partly clogged, a small amount of rich cream results.

4. If the crank is not turned steadily or at the rated speed, a larger amount of thin cream results and cream is lost in the separation.

5. If flush water or skim milk is allowed to run into the cream, the test will be lowered.

6. If the separator is not clean, the cream will be of low grade and quality.

7. If your cream test varies from day to day, it is partly due to the natural variation of the fat content of the milk.

8. If the separator is set for rich cream, the above conditions will cause a greater variation in the test than if set for thin cream.

9. If the creamery tests vary, check up on the separator and method of operation before blaming the tester.

Thin Out Woodlot For Best Results

A woodlot on a farm is one of the most valuable assets on the whole property. As a source of supply for fuel and lumber it should, if well looked after, never fail. Fuel and lumber while the war continues are not going to get any cheaper, nor probably for a long time afterwards.

What is the most satisfactory kind of woodlot to have? D. Roy Cameron, Dominion Forester, gives the answer. He says it is one on which there is a stand of trees of uneven age, small, young trees, half grown trees and old trees mixed indiscriminately through the lot. The reason for this is that there is a supply of full grown trees to be cut each year to be replaced by seedlings.

Young stands of trees will not pro-

vide a full crop of wood each year until the trees have become fully grown. However, on many of these young stands the trees may be too thick and when from 3 to 5 inches in diameter many may die from suppression. Thin them out, urges Mr. Cameron, by cutting a few of the slower growing trees every year or so. This will give a supply of wood each year until the stand has become fully grown. There are owners of woodlots who may boast that not a stick of wood has been removed for perhaps 50 years. Such a stand of trees cannot grow properly, and the owners get no returns from it. Just as it is necessary to thin carrots or other vegetables to get the best crop, so it is just as necessary to thin out trees in the woodlot.

Do It Now

NOW is the time to—

Skate.

Visit the dentist.

Fill the icehouse.

Play checkers evenings.

Buy some new overalls.

Oil and repair harness.

Thin the woodlot, fill the woodshed.

Get a new cord for the electric iron.

Order package bees for spring delivery.

Outguess the ground hog on winter weather.

Overhaul the tractor. Clean out the radiator.

Ask your wife what kind of perfume she likes best.

Ask Susie what the remarks mean on her report card.

Get a new box of filter disks for the milk strainer.

Disinfect seed grain, or have it done. Costs little, worth much.

Give the implement dealer a list of repair parts needed on machinery.

See if grease still coats plowshares and cultivator shovels in machine shed.

Put the Christmas Poinsettia away in a cool place—and no water, please, till you report it in May.

QUESTION BOX

Have you any problems that are bothering you? This column is at your disposal. Address your questions to the Editor, Macdonald College, P.Q.

Question: Please tell me how to treat ewes for parasites. When would be the best time?

Answer: The best way to prevent losses from parasites in sheep is to use the new system of treating adult stock during the winter or spring. For this purpose phenothiazine tablets are used to remove the adult worms and thus prevent contamination of pastures in the spring. The same treatment can be used to treat worm infection in the fall, at this time of year the commonest sign is diarrhoea.

The treatment requires a rather long description and is described fully in Special Pamphlet No. 51, War-time Production Series, which may be obtained by writing to the Agricultural Supplies Board, Ottawa.

Buy Forage Crop Seeds At Once

Farmers who expect to buy forage crop seeds for 1943 seeding should make arrangements to do so without delay. The available supply of Red Clover and Alsike Clover seed is below normal requirements. The maximum price that may be charged to farmers of the following seed in quantities of 25 pounds and over is Red Clover 34 cents per pound; Alfalfa 37 cents; Alsike 29 cents, all f.o.b. on the basis of No. 1 Grade. For lower grades of seed the prices must be proportionately lower.

*Buy
War Savings
Stamps*

Letters from our Readers

The Editor,
Macdonald College Journal.

Dear Sir:

During the past week I had the occasion to call at *two* farm homes. On each of these farms there was a large dairy herd and a flock of sheep. Each of the dairy herds was in fine condition, fed a well balanced ration and was giving satisfactory returns in milk. The sheep flock on each of these farms was in poor condition, being fed hay of poor quality and receiving no mineral except salt. One of these farmers has kept sheep a few years and found they did not pay any too well. The other farmer had taken advantage of the government services and secured a flock of ewe lambs last fall.

I am an old sheep breeder and I have found by experience that farmers should take better care of the sheep flock. It is a great mistake to expect a good crop of lambs in the spring from a flock of sheep poorly fed during the winter months. The farmer in the above case would not expect much milk from his dairy herd if fed on the same food upon which some flocks of sheep are expected to live and produce satisfactory returns. The condition of the lambs when dropped; their growth during the summer months; the farmer's profits in the fall largely depend upon the conditions of the breeding ewes during the winter months. During these months the ewes should build up flesh, energy and vitality if one is to expect a good lamb crop in the spring, and if the milk flow during the summer months is to be sufficient to maintain the proper growth and development of the lambs in summer. It is a great mistake to imagine that a sheep flock living on next to nothing during the winter months can give good returns in spring and summer. The feed need not be expensive feed. Of course clover or alfalfa hay — well saved — is the ideal feed for sheep, but when this is not available any hay (preferably fine) will do, provided it is cut not later than the last week of June and *well saved*, will suffice. Turnips make an excellent supplement for feed but if these are not available a little crushed grain and bran fed for a few weeks before the lambing season will greatly assist to strengthen the ewes and add to the milk flow.

S. WESLEY BOYD,
Cowansville, Que.

Frozen eggs are now being packaged in cellophane, with an outside overcoat of cardboard, as a further contribution to the metal saving program. Commercial shipments of Canadian dried eggs are being forwarded to Britain in 14-lb. packages.

When paint brushes on the farm are stored away for winter, they should first be thoroughly cleaned and dried. It is important that they be stored flat with the bristles straight. Wrapping in heavy cardboard or between wooden slats will attain this object.

PARENTS AND CHILDREN

by Mary Avison

This column will welcome comments or questions on the problems it deals with, or on other that arise in every normal home.

"Bad Boy"

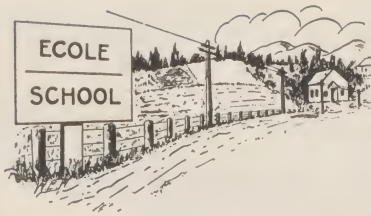
"Calling him a 'bad boy', every five minutes! If there's anything educational in that, I fail to see it."

This snatch of conversation, overheard on a train, after Christmas, has such a challenge in it for parents that it seemed worth passing on.

In the stress and rush of the Christmas season, during holidays when the house often seems too full of children, we become easily exasperated and say things we would not in our more thoughtful moments. But not only under stress does this happen. Some of us habitually confuse the deed and the doer, habitually condemn the child rather than the thing he does. To identify the child with the wrong way of acting is to imply that he cannot escape from misbehaving. To call him unkind or stubborn, sly or destructive, sets up for him that idea of himself which he will subsequently live up to because he thinks it is expected of him.

Yet there is often no moral quality, good or bad, in the things children do. We adults see it where it is not. They experiment with life:— with things, with animals, with other children, and with adults, to discover how they react, often without any other desire or purpose than to learn what they are like, and even that desire is unconscious more often than not. Buster pokes Susan in the tummy, or belabours her with his new trumpet to see what happens or out of sheer exuberant spirits; Lester pulls kitty's tail or tears all the pages out of a magazine because of the exciting noise or fuss this creates. Each must learn not to repeat these actions—but these children are not necessarily bad for wanting to do so. They are more probably healthy, wholesome and normal youngsters. Even if their purpose is to annoy, better to say, "Trumpets are meant for blowing: see how loud you can blow!" or, "Pulling pussy's tail is unkind and hurts; pat pussy and she will purr!" or, "Tearing pages is not the way to use books; you can turn them carefully, if you do it like this", "*That* is bad, but *you* can do something better". All these are positive. They separate the child from the wrong deed and leave him seeing himself doing the right thing in the future.

The ability to create in anyone the vision of himself doing better, the faith in himself that he can and will, is a great gift, and a quality essential to all who would teach and guide children. Let us as parents cultivate this quality in ourselves and call no more children 'bad'.



LIVING AND LEARNING



The Contribution of Education to the Winning of the War

(Part of an Address by Dr. Geo. D. Strayer of Columbia University to the Convention of the Provincial Association of Protestant Teachers.)

The urgency of the war situation demands that important adjustments be made in the programs of our secondary schools immediately. We may not rest satisfied with anything less than a maximum contribution to the war efforts. Modifications of the school programs in line with the necessity of preparing youths for their place in the armed forces or in industry, should not be thought of as detracting from the significance of education. Indeed, it may well be contended that every boy or girl who feels that school work is directly related to the winning of the war, will find new meaning in his school experience.

In a Conference held under the auspices of the United States Office of Education and the Wartime Commission in Washington the latter part of August, it was proposed that certain important changes in the curricula of the secondary schools be undertaken at once. Among the more important suggestions offered were the following:

Courses in mathematics including arithmetic, algebra, geometry and trigonometry should draw problems from the field of aviation, navigation, mechanized warfare and industry.

Many of our ablest teachers of mathematics believe that this type of revision of courses will result not only in preparing young people for their war duties, but that it will also revitalize teaching of mathematics.

It was proposed that courses in industrial arts be directly related to war needs and that special attention be given to the development of understanding and of skill in the operation of tools.

In this same general area, it is proposed that more boys be given opportunity in the field of auto-mechanics. These courses are to be associated with the actual productive work carried on in local garages and on farms, with particular

emphasis on the repair and operation of trucks, tractors and automobiles.

New emphases were suggested in the work in physics. It is proposed to stress the work in mechanics, heat, radio, photography and electricity. As in the case of industrial arts and auto-mechanics the courses are to be given vitality by the attack upon problems that occur in the homes, in schools and in industry where opportunities are available for co-operative work.

Revised courses in the social studies are to place emphasis upon war aims and issues. They are, as well, to take account of the possible co-operation of young people in all community undertakings related to the war effort, or to the common good.

Very definite provision is to be made, particularly in the larger schools, for pre-flight courses which will prepare boys, and in some cases girls,

for their later activity related to the air force.

Possibly the most significant of all will be the attempt to give to young people a better understanding of the implications of the struggle in which we are engaged for the preservation of our democratic way of life. The implication of the global concept of the present war and of the conflict of ideologies is certainly not beyond the comprehension of young people.

Those of us who are responsible for organized education will willingly cooperate with all other social agencies for the realization of our common purpose. Members of the teaching profession in all of the United Nations have already gladly accepted new responsibilities. We may look forward to the development through community councils and other similar agencies of a coordinated effort of churches, health and welfare agencies, libraries, recreation centers, and independent agencies such as the Y.M.C.A., Girl Scouts, and other civic organizations. The winning of

THE TEACHER

Mark Hopkins sat on one end of a log
And a farm boy sat on the other.
Mark Hopkins came as a pedagogue
And taught as an elder brother.
I don't care what Mark Hopkins taught,
If his Latin was small and his Greek was naught,
For the farmer boy he thought, thought he
All through lecture time and quiz,
'The kind of man I want to be
Is the kind of man Mark Hopkins is'.

ARTHUR GUITERMAN.

the war is a first consideration in the thinking and planning of all these groups. We who work in education may be counted upon to make our resources available and to contribute in any areas in which we have special competence.

Organized education is more than ready to do its full part in the winning of the war. The schools of democracy were founded in order that we might perfect our form of social organization. Men and women engaged in the teaching profession make no plea for themselves, but they do insist that the maintenance and expansion of the program of education is essential to the winning of the war and to the winning of the peace. They believe that the schools can and should modify their programs to take account of current pressing needs. They have operated, significantly in the training of men and women for more efficient participation in the industrial and agricultural activities which are so necessary. They recognize the fact that the winning of the war is the basis upon which the education of free men may be continued in the world.

Farm Forum—Winter Series

Farmers in Community Action

- Jan. 11th How Can the Farmer Take Part?
- Jan. 18th A National Health Plan
- Jan. 25th Credit Unions
- Feb. 1st Education for Farm Living

Security for the Farm Family

- Feb. 8th Taking Stock of the Farm Home
- Feb. 15th The Family Farm as a Production Unit
- Feb. 22nd Debt Menaces the Family Farm
- March 1st Prices and Production

Building for the Future

- March 8th Home Market Problems
- March 15th Conservation and Land Use
- March 22nd Farmers and Reconstruction
- March 29th Feeding the World in an Organized Way

Re-Education of Germany Must Be Planned

An "intellectual occupation force", to take over the job of re-educating the German people along democratic lines after the war is suggested by Dr. Clifford E. Erickson, Associate Professor of Education at Northwestern University.

Dr. Erickson admittedly enters upon uncertain and dangerous ground in proposing what would in effect be an attempt to impose American ways of thinking upon another people. But he is not alone in this move, as was judged at least by the enthusiastic reception accorded the idea among the listeners at the university summer session lecture which he addressed. Elsewhere today wherever the subject is broached, observers report, there is a growing sympathy for some such step to counteract the years of Nazi indoctrination of Germany's youth.

Exterminate or Re-educate

"We must," declared Dr. Erickson, in a comment which he obviously did not intend to be taken too literally, "either exterminate the Germans, or develop for them a programme of re-education."

Already, he pointed, military authorities are carefully preparing for armed occupation of the Axis countries, but no effort has been made yet to train social scientists for peacetime education.

"If we wish to keep peace," he said, "we must do more than impose military occupation on Germany for two or three years. We must educate an entire new generation in the democratic way of life. Hitler has used the educational system to indoctrinate the German people with false ideals,

and it will require the combined work of political scientists, economists, and philosophers to develop an ideology which will prevent another war in the next generation."

The nation should begin training an intellectual corps for this task immediately, he insisted.

Among the Nazi doctrines that would have to be weeded out by more or less autocratic methods is that of Aryan race supremacy. With the proper approach, however, he said, in ten years it would be possible to discuss Nazi theories in German schools objectively, in the same manner that opposing types of government are analyzed in our own schools.

In the Realm of Controversy

Just how all this would fit in with the unhampered practice of self-determination, which is basic in democracy and the antithesis of the imperialism and territorial aggrandizement foresworn by those who subscribe to the Atlantic Charter, is one of the questions that will keep the whole subject in the realm of controversy for some time.

Dr. Erickson predicts his assumption of the possibility of putting such a scheme into operation on the inevitable establishment after the war of some kind of international organization. He holds, however, that if such an organization is to function more effectively than did the League of Nations, the intellectual occupation force he suggests is necessary in order to rebuild and maintain the necessary moral support for such an institution.

—Christian Science Monitor.



DEPARTMENT OF AGRICULTURE

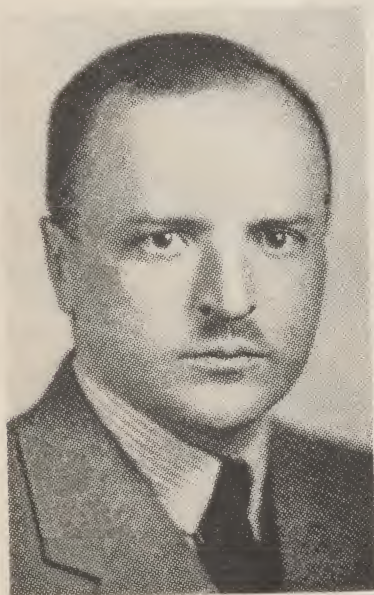
Activities, Plans and Policies of the Quebec

Department of Agriculture

Blueprint for 1943

by Dr. Adrien Morin,

Associate Deputy Minister of Agriculture



The year which has just finished will not be soon forgotten by the farmers of Quebec. There was an abundant harvest, the markets absorbed all our crops without any trouble and prices were exceedingly good. Agriculture came into its own. Admittedly, there were many problems to be solved during the last twelve months, problems aggravated by the war. Nevertheless, 1942

left the farming population in a very favourable position; barns are full and the financial situation is satisfactory. We have a good start for 1943.

During the coming year we must increase our production still further. Our efforts must be directed to meeting the demands caused by wartime conditions. There is the civilian population and our armed forces to feed; food must be grown for our allies. Demands are increasing daily from all quarters. Agriculture is an essential war industry which must keep pace with the increasing tempo of the national war effort.

The production programme for the year which has just commenced is a courageous one which will require for its successful completion the whole-hearted co-operation of every member of the farming community. But its success will bring that satisfaction which comes from the realization of a good job well done, and favourable prices should bring satisfying financial returns.

Our accomplishments in 1942

Before looking toward 1943 it will be well to review briefly our accomplishments during the past year. It is an impressive story, one which should spur us on to even greater efforts in the year to come.

We made a notable record in cheese production. We produced 28 million pounds more than last year, an

increase of 77%. Egg production soared more than 2 million dozens. In 1941 we marketed 24 million pounds of poultry meat and in 1942 we sold 27 million pounds, an increase of 13%.

Hog production remained at about the same level. Hogs sent to market decreased by 100,800 head, but local consumption increased during the year by about the same amount.

Our production of field crops, helped by a good season and excellent cultural methods, was very good. Estimates of harvest show an increase of 10.1% over 1941. With a few rare exceptions all grain crops showed a better yield per acre. The same is true in the case of food crops, corn and hay. A new high was reached in the production of mixed grain, where we had an increase of 42%. There was an increase in the acreage planted to potatoes of 3%, but the total crop was 10% less than last year.

Finally, there were 46 new co-operatives organized in 1942, making a total of 418 with 33,000 members. These organizations have performed a most valuable service during the last few years, and there can be no doubt that they will play an important part in post-war reconstruction. On the whole, the year 1942 was a very good one and we are starting 1943 under very favourable circumstances.

The objectives for 1943

The Dominion-Provincial Conference at Ottawa, held in mid-December, set up a comprehensive programme for 1943. The decisions arrived at can be summed up very briefly; Canada will grow less wheat and rye, and will increase production of all other cereals, livestock, and dairy products. There is to be reduction of 18% in the area sown to wheat and 31% in the area sown to rye. Production of potatoes will be increased 15%, mixed grains 1%, barley 11%, oats 12% and flaxseed 68%. Increases desired for livestock are: beef cattle, 9%, hogs 28%, sheep 12%, eggs 29%, poultry meat 10%. Dairy products are to increase as follows: raw milk 6%, butter 15%, evaporated milk 5%, powdered milk 41%. A cheese production equal to that of last year will supply all the cheese necessary.

These figures give some idea of the size of the programme drawn up at Ottawa. It will require a supreme effort on the part of our farmers to reach all the various goals,

and it cannot be accomplished without new restrictions and controls over the eating habits of our people.

Quebec's objectives

Every province in Canada was represented at the conference, and each province agreed to see that its proportion of the common objective was reached. The Quebec representatives agreed, on behalf of the farmers of Quebec, to increase hog production 25%, butter 10%, eggs 15% and poultry meat 14%. As far as field crops are concerned, they undertook to increase the acreage in barley by 8% and to increase the potato acreage by 20%.

In order to get this increase which has been promised, there will have to be a considerable expansion in our hog raising industry. It will be a difficult but not impossible task to increase our production of pork by 25%. Some of the factors which indicate that this can be done are as follows: breeders have good brood sows on their farms, many of which were supplied by a special policy of the Department of Agriculture. Feed is plentiful. These are two of the most important requisites for success.

We have already made remarkable progress in our poultry industry, and there is no reason to believe that the progress made during the past year will not continue during 1943. As for dairy products, our efforts will be directed toward getting better yields from our present herds. We must get more milk from every cow in the barn. There must be no increase in the production of butter at the expense of our cheese programme. We must instead increase our butter production by increasing the amount of milk produced, leaving cheese production at the same level it was last year. The very substantial bonus of 10c per pound of butterfat is a great inducement to the farmer to make sure that this dairy cows get the best possible feed during the winter, and should encourage him to improve his pastures by the proper use of fertilizer next spring.

An increase of 20% is asked in the area planted to potatoes next spring. In this connection, it should be pointed out that potatoes are one crop which fit into every farm rotation system. It is a hoed crop, which means that the necessary cultivation will improve the soil. Large plantings should be profitable, for artificial fertilizer for this crop is easy to get and inexpensive, and potato prices are attractive. Particularly in those districts where potato culture is already well established, larger plantings must be made.

Two problems

The greatest problems facing the farmer in 1943 will be the scarcity of labour and the difficulty in getting machinery. The only way to solve the labour problem will be in making the best possible use of what labour there is. There is no one who will deny that the farmer is a hard worker, but it is also true that in some cases his work can be organized more efficiently. If cultivating is done at the right moment there will be no need for furious overtime work later to try to get ahead of the weeds. Getting the

hay in early leaves time for the rest of the harvest. The long winter evenings can be used to advantage in careful planning for next year's operations.

About all that can be said on the subject of farm machinery is "Take good care of what you have; it will be a long time before you get any more." On the basis of the 1940 manufacture, available farm machinery will be reduced by three-quarters. The manufacture of spare parts is to be increased, however, and the implement companies will make about half as much again as is usually supplied in what may be considered a normal year. The fact remains that there will be very little new machinery to be bought, and only farmers who can show that they must have new machinery will be allowed to purchase any of the small stocks on hand.

Government Assistance

It is hardly necessary to say that the Provincial Department of Agriculture will co-operate to the greatest possible extent with the Federal authorities and with the farmers, to see that the goals for 1943, which are considered absolutely necessary, are reached. As in the past we will help in distributing the bonuses and grants offered by Ottawa; bonuses on the purchase of chemical fertilizer; freight assistance on feed grain; butter fat bonuses, etc. Our technicians and all our many and varied services will be at your disposal to help you in your planning, to advise you in your operations and to give all the help and advice possible.

And now for a few words of advice. Buy your chemical fertilizer early, to be sure that it is delivered on time. Make your plans for next summer's work now. Plan to prepare your land in the best possible way and use only the very best of seed. Keep your livestock healthy and be unrelenting in our fight against disease and insects.

At the beginning of this new year, one which may well see our armies victorious, we wish you success and prosperity, and may you on your part be victorious over all the sacrifices which war time conditions cannot but impose. And may Providence bless us with another season of good weather conditions. We know that each and every one of our farmers will do his best so that our people will, in 1943, have an abundance of the food that is necessary to make a healthy, happy population.

Director of Publicity Retires

Mr. Armand Létourneau, who for the past twenty-five years has been director of publicity for the Department of Agriculture, has retired on account of ill health. In poor health for some time past he nevertheless continued with his duties, on many days doing his work at his home rather than face the ordeal of making his way downtown to the Government offices. He was finally forced to withdraw completely early last month.

His successor has not yet been appointed.

Agronomists Hold Their Annual Meeting

The agronomists of the Provincial Service held their annual convention in Quebec during the week of December 14th. This yearly get-together is an occasion when the activities of the past year can be reviewed and discussed, and plans made for the forthcoming year. As this was held just after the Dominion-Provincial Conference which set farm objectives for Canada for 1943, it is not surprising that most of the time was spent in discussing the programme set at Ottawa, and trying to find ways and means of carrying it into effect as far as it concerns this province. The means which are to be taken to ensure that we get this increased production have not yet been finally decided upon, but more information will be coming out from time to time. Meanwhile, the broad plan was traced out by Premier Godbout and its salient points are as follows:

1. Directing our production toward filling the requirements of the civilian population and of our allies.
2. Organizing manpower to serve at its maximum capacity.
3. Finding new formulas to meet new needs.
4. Preparing a programme which will improve the situation of the average farmer.
5. Making use of the experimental farms to undertake experiments which will profit the districts in which they are situated.
6. Making best use of the agricultural budget of the Province, which is higher than any other province's.
7. Developing home activities so as to make use of every member of the family, thus preventing breaking up of families and improving morale.
8. Establishing an insurance plan which will protect the farmer.

Here, in cold figures, are the amounts of various kinds of crops which are to be produced in Quebec during the coming year. They represent a real challenge, but one which must be met if we are to keep up with the rest of the Dominion in supplying food for our fellow countrymen, our allies and the fighting forces.

We are committed to supply 409,500 hogs in 1943. That is 25% more than last year. In other words, a farmer who sold 20 hogs last year must put 25 on the market in 1943 if we are not to fall down on the job. Last year, for various reasons, we marketed only 350,000 hogs; it will take a real effort to get the figure needed for 1943.

Quebec is asked to supply 78,100,000 pounds of butter, which is 7,100,000 more than in 1942. In this connection it seems that the subsidy on butterfat is having some effect in Quebec at least, for our butter production is on the upgrade. The November figures showed an increase of 24.4% over the same month in 1941. Cheese requirements are down 10% to 58,617,000 pounds.

In poultry products Quebec is asked for 43,826,000 dozen eggs, whereas our total production in 1942 was

38,100,000 dozen. Poultry meat needed from Quebec is 31,177,500 pounds, 14% more than last year.

No definite quotas have been set for livestock but we need to produce all we can to help the Canadian total of 1,200,000 beef animals, 837,000 lambs and 780,000 calves. We are asked for 1,700,000 acres of oats, 150,000 acres of barley, 255,000 acres of mixed grain and 188,000 acres of potatoes.

Mr. Godbout also said, during the meetings, "In the past, we have advised farmers to pay less attention to raising horses and to concentrate on dairy animals. After the war, we will need horses, and we will also be asked to sell them to other countries. Now is the time to get ready to meet these coming demands."

THE SEED SUPPLY FOR 1943

Although in some respects the matter of seed supply for 1943 is not serious, with regard to others there are a few facts that should be available to farmers. It is, of course, too early to know accurately the amount of seed available in the country for use as seed, but careful estimates have been made that give us fairly exact information.

The conditions in Quebec in 1942 were very satisfactory for the production of good yields of grain of high quality. In some sections harvesting conditions were such as to cause slight discoloration of the grain, but in general this will not lower the germination or the value for seed. There should therefore be an ample supply of graded seed of high quality. There will thus be no reason for the use of poor quality seed and no need to bring in ungraded or inferior seed from outside sources.

Although very much smaller quantities of timothy seed than usual were produced in Quebec last year, the production in Canada is ample to meet all our needs. The production of Red Clover in Canada is, on the other hand, not more than fifty per cent of normal. Red Clover seed is, therefore, likely to be scarce with the result that it may be difficult to get. As regards Alsike Clover seed of which, as a rule, Canada produces large quantities for export, the crop is this year expected to be extraordinarily light, and there is a likelihood that seed of this crop will not be sufficient for all to get their supply.

Alfalfa seed is produced in large quantities in western Canada, mainly in Saskatchewan. Although the crop is somewhat smaller than usual this year, there is ample for Canadian needs. As a rule, however, large quantities of this seed are sold to United States buyers. This year again, there is a keen demand and large quantities have been contracted for export. However, the Canadian government is understood to be reserving a sufficient quantity to ensure that Canadian farmers will have a satisfactory supply.

These facts should make it clear that it is advisable to buy your seed supply early.

Better Farming Competitions

Since this is the time of year when new members are starting to take part in the "Better Farming Competitions" which have been for a number of years a feature of the Department of Agriculture policy, it seems an opportune time to describe these competitions in some detail. The popularity of these competitions is shown by the numbers of new contestants each year, and the lessons learned by the farmers who have, in carrying out the demands of the competition, followed the farming practices approved by Government officials, have been of great benefit to our agricultural industry as a whole.

There are six main purposes for which this plan was originally devised. These may be listed as follows:

1. To install on the contestant's farm a system of farming that is adapted to local conditions of soil, climate, markets, labour supply, etc.
2. To introduce cropping plans that give a better distribution of crops on the farm and to establish proper systems of crop rotation.
3. To organize the production on each farm so as to furnish the feed for the livestock it carries.
4. To develop one or more cash crops on each farm, wherever possible.
5. To plan production so that there will be a reasonable relationship between the various crops on the farm, and to have them grown in sufficient quantity to make it worth while.
6. To establish a good system of farm bookkeeping.

Rules

Each competition lasts five years and starts on the first of January. During the summer before the competition starts a plan of the work which it is hoped to accomplish during the five years that the competition lasts is drawn up by the farmer, his agronomist, and representatives of the Field Crops Division of the Department of Agriculture. Sketches of the farm, showing the proposed cropping plans, are made and three copies of the whole programme are made, one of which the farmer keeps. Then the necessary instructions are given the farmer to enable him to start on his five-year plan as soon as he can get onto the land in the spring. These will include such items as summer ploughing, drainage, liming, fertilizing, etc.

The contestants must show, before they are accepted, that they are capable of following the instructions that will be given them, and that they are willing to have their operations directed by the Department technicians. The county agronomist prepares a list of candidates in his district, and each of these is visited and his farm inspected. If this inspection shows that there is a possibility of improvement in the farm, and if the farmer impresses the inspectors as one who is likely to profit from the plan, his application is accepted. Any farmer may withdraw from the competition before the end of the five years, but his

request to do so must be made in writing.

All the farmers who take part in this competition are supposed to follow, to the best of their ability, the system carried out at the various demonstration farms in the province, which means that they will adopt a satisfactory cropping plan, will divide their farm in the most useful way, keep their cows on R.O.P., adopt a practical plan of animal breeding and raising, drain their fields and establish a regular system of rotation.

The results are judged every year and every farmer who has scored at least 65% of the total points allowed is given a bonus of \$20.00. At the end of the five year period a final inspection is made of all the farms entered in that particular contest, and the following prizes are awarded:

1st prize	.....	\$100.00
2nd "	.....	90.00
3rd "	.....	85.00
4th "	.....	80.00
5th "	.....	75.00
6th "	.....	70.00
7th "	.....	65.00
8th "	.....	60.00
9th "	.....	55.00
10th "	.....	50.00
11th "	.....	45.00
12th "	.....	40.00
13th "	.....	35.00
14th "	.....	30.00
15th "	.....	25.00
16th "	.....	25.00
17th "	.....	20.00
18th "	.....	20.00
19th "	.....	15.00
20th "	.....	15.00

Any competitor who builds a manure pit while the competition is on is given an additional grant of \$25.00. Another \$25.00 is given for the construction of a silo of a root cellar, but no single competitor is paid for both buildings. In other words, even if he should install a manure pit, a silo and a root cellar, he cannot receive more than \$25.00.

In any single competition the minimum number of contestants that will be accepted is 25, and not more than 35 will be accepted.

The local agronomist visits the farm of each contestant at least once each year and judges the progress being made, and decides if the farm is being operated in accordance with the suggestions made. Should the farm change hands while a competition is in progress, the new owner is allowed to continue with the contest until the end of the five year period.

1943 PROGRAMME . . .

*(Continued from page 2)***Grain**

One main objective of next year's programme is the huge increase in coarse grains. Mr. Gardiner pointed out that this increase was necessary to sustain the increased meat and dairy products schedules, and that provision had to be made for a possibly smaller yield as compared with the bumper crops of 1942.

It appeared evident that the increased production of coarse grains asked for would have to come from the West, for the Eastern provinces saw little hope of any greater production. The Westerners conceded that increasing coarse grains could be done with a decrease in wheat acreage, and the feeling of the meeting was that an increase of about $3\frac{1}{2}$ million acres of coarse grains and a corresponding decrease in wheat acreage could be made. It was realized that there will be little or no greater cash returns from the grain crop — it will be got rid of by feeding. As much as possible of the grain now on western farms should be stored there and made available for the east. It was pointed out that there is now enough grain for livestock for the next two years, which should greatly benefit the livestock industry in its expansion programme.

Meat

In the words of Mr. Gardiner "Canadian farmers should raise all the beef and hogs possible throughout the next two years". Farmers were also urged to add weight to their beef cattle before marketing them.

All but one province agreed to try to raise more hogs in 1943. It was suggested that we could increase the amount of pork products for export by trying to restrict home consumption, by substituting other meats in the diet. Emphasis was also placed on the need for saving and growing to maturity one or two more piglets in every litter.

We will need about 8 million hogs; a tall order. It can be done if production in Quebec, Ontario, Manitoba and Alberta can be stepped-up between 20% and 25%. Saskatchewan hopes to show a 70% increase.

A goal of 1,200,000 head of beef cattle and 780,000 head of veal was set. Sheep and lambs are expected to increase by about 12%, which will help our wool situation at the same time.

Dairy Products

Total milk production in Canada must be increased by about 6% if estimated requirements for dairy products in 1943 are to be met. Demands for these products are increasing constantly. The labour situation here is recognized as a limiting factor to any great expansion but all provinces agreed to try to reach their new objectives notwithstanding, even though some are regarded as high. It was pointed out that the reduced price for fluid milk to consumers, recently announced, would tend to lessen the amount available for butter, cheese and concentrated milk, since it is quite

probable that consumption of fluid milk will rise sharply with the decreased price.

The butter quota has increased 15%, evaporated milk 5%, powdered milk 41% while a decrease of 27% in condensed milk is projected. Cheese requirements are estimated as the same as in 1942, around 200 million pounds.

Poultry Products

A large increase is called for in poultry products, and a high standard of feeding and general management will be necessary to reach the 1943 goal of 345 million dozen of eggs and 258,900,000 pounds of dressed chickens. The logical place for expansion in poultry keeping is on the prairies, but buildings and brooders are short. Poultry is one branch of agriculture in which a considerable expansion can take place in a relatively short time, should a shortage of other meats develop.

Sundry

Increases in certain minor crops have been asked for. Last year 1,492,000 acres were used for production of flaxseed. Next year 2,500,000 acres should be sown to this crop. The main increase will likely come from the West. 60,000 acres of soybeans will be needed in 1943, compared with 41,000 last year.

More sugar beets are needed, but growers are not likely to sign contracts with the factories unless and until they are sure of sufficient labour to cultivate and harvest the crop. It was hoped that bumper crops of maple products and honey would help to relieve the sugar situation. No definite figures for fruits and vegetables were set, but it was agreed that increases would be useful wherever possible. A definite increase of 15% in potato production was asked for, however, which it was thought could be obtained by an increased planting of 10% in the Maritimes, 5% in Ontario and 10% in British Columbia.

New Secretary of the Quebec Dairy Industry Society

The Hon. J. E. Moreay, president of the Quebec Dairy Industry Society, has announced the opening of a permanent office at St. Hyacinthe and the appointment of Mr. Bruno Cordeau, B.S.A., as secretary. The permanent office will help the Society in carrying out its programme of instruction and information among the dairying interests of the province.

The new secretary is a graduate of Oka, and also holds the diploma of the Dairy School at St. Hyacinthe where he spent several months in charge of the experimental butter factory there.

An old colored man was asked what he called his mule.

"I call him Co-operation," came the reply.

"But why did you come to give him such a name as that?" he was asked.

"Fum studying de animal an' readin' de papahs. Dat mule gets mo' blame an' abuse dan anyt'ing else in de township, an' goes ahead doin' his work jes de same."

FLOUR MILLING . . . *Concluded*

in whole wheat bread and the efforts they and others have exerted for many years in trying to induce people to eat this type of bread rather than white bread. Unfortunately, the public as a whole prefer white bread judging from the fact that approximately ninety-five loaves out of every hundred which are eaten daily in Canada are white.

Failing in their efforts to induce enough people to eat whole wheat bread, the health authorities concluded that some other scheme would have to be worked out. Among other things, they wondered if it might not be feasible to adjust our milling systems in such a way as to make it possible to produce a flour which would carry a substantially larger proportion of the vitamin-rich fractions of the wheat kernel and yet produce a white loaf. This idea, conceived in the autumn of 1940, led to the initiation of a series of milling experiments in the laboratories of the Cereal Division Experimental Farm, Ottawa, in co-operation with various commercial mills, and culminated the commercial production in Canada of a white flour known officially as Vitamin B White Flour (Canada Approved). This flour, as defined in the Foods and Drugs Act, must not carry less than 400 international units of vitamin B₁. This, it will be noted, is approximately 2½ times greater than the average amount of this vitamin found in ordinary 2nd patent bakers' flour.

This latest development in flour milling illustrates still further the flexibility of the modern flour mill and the ingenuity of the present-day miller.

PHENOTHIAZINE AND SURGERY

Farmers who use phenothiazine to remove sheep worms are making an indirect contribution to war-time surgery.

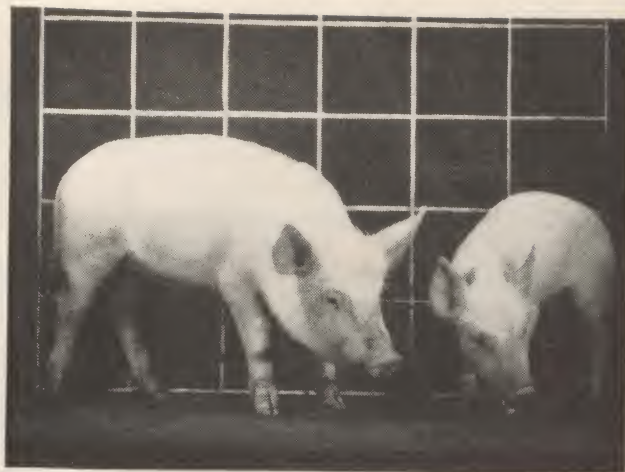
Sheep intestines are used to make sutures for stitching wounds. These sutures, unlike silk, do not have to be taken out when the wound is healed (anyone who has ever gone back to the doctor to have the stitches taken out knows what that is like). They are gradually dissolved by the body fluids and disappear.

Before the war a large part of the supply of intestines had to be imported, because only those which had no holes chewed in them by nodular worms could be used for sutures. But phenothiazine removes worms; our sheep flocks are becoming worm-free through the use of this drug and as a result we are producing more and more good sutures for our doctors to use.

"Do you act toward your wife as you did before you married her?"

"Exactly. I remember how I used to act when I first fell in love. I used to stand in front and look at her house almost afraid to go in. Now I do the same thing some nights."

And then there was the cow which, after jumping the barbed wire fence, said "I'm udderly ruined."



Two cents worth of iron made the difference between these eight weeks old littermates. They more both of the same weight at birth

Advices Careful Study

The farmers attending the annual meeting of the Colchester County Farmers' Association at Bible Hill Tuesday were cautioned against going headlong into the establishment of artificial breeding units. The speaker, Principal Eric Boulden, of the N.S.A.C., pointed out the advantages of securing the services of a good sire through the artificial unit, but drew attention to the fact that artificial breeding must not be looked upon as something costing less money than the natural method. Special care, he remarked, should be taken in securing an operator who will meet the many exacting requirements of the position.

The recently formed Cornwallis (Nova Scotia) artificial breeding unit has 168 members and about 1,060 cows listed. The Guernsey bull, Village Major and the Shorthorn bull loaned the unit by Geo. A. Chase, are now located at the unit's place of business, the Bull Palace, Port Williams, Nova Scotia.

Interest in Artificial Breeding Grows in Nova Scotia

Interest continues to grow throughout the province in artificial breeding with prospects of Colchester being next on the list to operate a unit. The subject was discussed at the recently held annual meeting of the Colchester County Agricultural Society, when a committee was appointed consisting of Douglas Curtis, Old Barns; Arch Cox, Princeport; A. E. Dickie, Lower Truro, to consider the matter, and if thought advisable, to call a series of public meetings for the farmers to get together and go into the matter more in detail. This committee, after conferring with Principal Eric Boulden, of the N.S.A.C., J. A. Steele, Federal Livestock Officer, and George Cook, Agricultural Representative, decided to hold its first public meeting at Old Barns, December 16, when the special speakers were Dr. E. E. I. Hancock, Provincial Animal Pathologist, and A. B. Banks, Superintendent of Agricultural Societies.



THE COLLEGE PAGE

THE MACDONALD CLAN

Notes and news of graduates and former students

DIPLOMA COURSE GRADUATE MAKES AN ENTERPRISING FARMER

When one of our ex-students develops signs of special ability or business acumen we like to believe that his courses at Macdonald have something to do with it. No doubt this is true, though it may be hard to prove, since it is obvious that the fact a boy has the courage and enterprise to break away from home to come here, alone shows that he has more than average initiative.

Be that as it may, we are always pleased and feel proud when we see boys who have been at Macdonald make good in the field of farming, and a boy whose farm the writer recently visited, and whose activities prompted these thoughts, is Jim Tracy of Shawville, Pontiac County.

Jim always had a flair for mechanics, and, before coming to Macdonald, this was so strong that he left the farm to work in his uncle's garage. This experience may have had something to do with his coming to Macdonald; at any rate, after having had a taste of what it is like to be grease to the elbows every day for about three months, he decided that there might be something to farming he had not seen before. So he joined the Diploma course in the fall of 1930. He did good work in studies, particularly so in all the mechanics and blacksmithing courses.

Today he is running a large, well built farm about six miles from Shawville. He is a good farmer, but one of his strong sidelines is, and likely always will be, farm

mechanics. Even while at home he built a farm shop equipped with a forge and blacksmithing equipment, an engine for driving a grinder and drill and a stove to make the place comfortable for winter work. Now, on his own farm, he again has a shop bigger and better than the first one, and containing, in addition to his former equipment, power wood-working equipment.

Runs a Sawmill

Since the war has been responsible for considerable improvement in lumber markets, Jim decided to start a mill of his own. When we visited him a short time ago we found him busy at the sawyer's stand in his own mill, a picture of which we are showing herewith. To power the mill he uses the combined output of a Case tractor and a used automobile engine. The job of sawing logs into lumber always is one which takes considerable power and this mill seems to use the power of the two engines to good advantage.

As we said before, we admire initiative and the courage displayed when a man dares to undertake the unusual and we like to believe that we had something to do with the development of these qualities. Best of luck, Jim.

C.A.A.E. MEETS AT MACDONALD

A special committee of the Canadian Association for Adult Education met at Macdonald College during the Christmas holidays to consider the whole future programme of the Association, with particular reference to its function during the war and its part in the post-war planning.

Professor E. A. Corbett, Director of the Association, presided at the meetings of the committee which included Professor Watson Thompson, Director of Extension Work at the University of Manitoba, Robert Mackenzie, representing the extension department of the University of British Columbia, Mrs. G. V. Ferguson, President of the Junior Leagues of America, R. E. G. Davis, Secretary of the Y.M.C.A., Neil Morrison of the B.B.C. and Dr. W. H. Brittain of the College.

Special information was given the committee by Prof. F. R. Scott of the Faculty of Law at McGill University, Mr. John Marshall of the Rockefeller Foundation, Mr. Petagorski of the National Film Board, and others.



Jim Tracey's sawmill

Active Farmer is Chosen Lieutenant Governor of Nova Scotia

For the first time in the history of Nova Scotia, a citizen has been called from active farm life to accept the post of Lieutenant Governor. Of the 19 incumbents to date of that office, the highest in the gift of this province, there have been men of high military rank, parliamentarians, industrialists, merchants, jurists, financiers, one commercial traveller, but never until the selection of Dr. Henry Ernest Kendall for Curry's Corner, Hants Co., has there been chosen one who is practical, full-time farmer of many years' standing. The selection is popular. It has been heartily approved by many farmers who see in it not only a well merited tribute to the appointee but also a tribute to the farming industry.

Twenty-three years ago, at the conclusion of a brilliant medical and military career, Dr. Kendall purchased a large farm in Hants County, which throughout the intervening years has been home to him in every sense of the word. Being always progressive he has made many improvements in the place. Today it is a farm property of which any man might well be proud. The doctor has been especially interested in dairying and horticulture. On his farm is a purebred Guernsey herd which he takes a delight in exhibiting each year at the county exhibition. His interest in horticulture has been recognized by his election to the presidency of the Nova Scotia Fruit Growers' Association and membership in the Apple Maggot Control Board. He has been actively associated with the Windsor Agricultural Society, the Windsor Co-Operative Store, and is secretary of the Curry's Corner Fruit Company. Public recognition of the doctor's services to agriculture was given in 1935 when the rank of "Honor Farmer" was conferred on him — an award for outstanding public service and leadership in promoting the interest of agriculture. A near neighbour, hearing of Dr. Kendall's appointment, remarked, "The doctor is highly respected by the farmers of Nova Scotia, and especially so by his neighbours. He is one of the few professional men who has purchased a farm and has entered wholeheartedly and successfully into its operation." A son of the governor designate, John Kendall, is a student at the Nova Scotia Agricultural College.

Slaughter for Home Use

The recently announced order of the Wartime Prices and Trade Board states that "After January 1, 1943, no person shall . . . unless he has previously obtained a permit from the Foods Administrator or any other authorized person, operate an abattoir or slaughter house, or slaughter live stock, or have live stock slaughtered for him if the meat so obtained is sold or offered for sale in fresh, frozen or other processed form".

The purpose of this order is to obtain more complete control over meat supplies in the Dominion; to get a better picture of the sources of meat supplies in Canada and to prevent the development of any "black markets."

There is no intention of interfering with the legitimate meat trade established through the years by farmers who are accustomed to killing livestock and selling the meat in public markets or from door to door, but farmers who slaughter for this purpose must have a license.

There is one point about this order which does not appear to be clearly understood by everyone. *The order does not apply to farmers who slaughter for their own home use.*

N.S. Butter Production Increases

Creamery butter production in Nova Scotia totalled over 542,578 lbs. in October. This was an increase of 5.7 per cent over the October 1941 total of 513,194 lbs. This encouraging report is contained in the monthly summary issued by W. J. Bird, N.S. Dairy Superintendent. For the ten months ended October 31, 1942, the total Nova Scotia production was 5,924,572 lbs. which was an increase of 1.9 per cent over the 5,812,301 lbs. produced in the corresponding period of 1941. While production in this province has been somewhat on the increase, there has been a market decline in Canadian cold storage holdings. On November 1, 1942, cold storage holdings in nine cities, totalled 26,622,172 lbs. The total on November 1, 1941, was 44,972,965 lbs.

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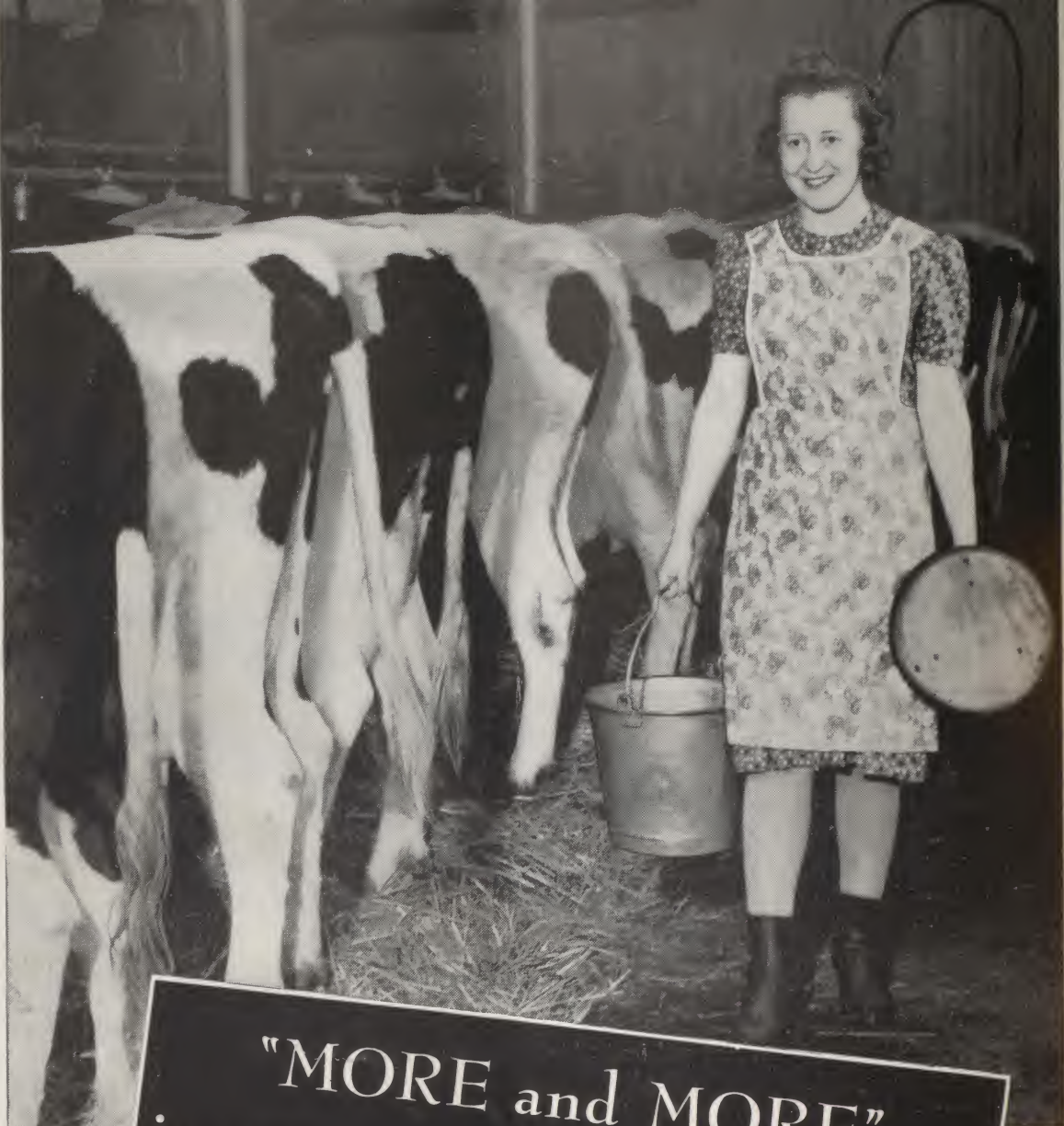
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